



# ESGAB ANNUAL REPORT 2023

Fifteenth annual report by the  
**European Statistical  
Governance Advisory Board**  
to the European Parliament and  
the Council of the European Union  
on the implementation  
of the European Statistics  
Code of Practice by Eurostat and  
the European Statistical System  
as a whole



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# FOREWORD

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It is my pleasure to present the 2023 Annual Report of the European Statistical Governance Advisory Board (ESGAB), the 15th report of its kind. In this year's report, ESGAB assesses the implementation of the European Statistics Code of Practice (CoP) in the European Statistical System (ESS) as a whole.

The role and importance of statistics for policymaking and policy evaluation has grown worldwide, including of course in the European Union (EU) and its Member States. Statistics have become more relevant as yardsticks for the achievement of policy objectives, for their communication and for making comparisons between countries or over time. In addition to traditional ones, this evolution presents producers of official statistics with new opportunities and new challenges. As statistics become more policy relevant, so do statisticians who produce them. This generates opportunities but can also create risks. Such risks need to be identified, assessed and managed properly and proactively.

The CoP has been the cornerstone of the ESS common quality framework for the past 18 years. Having served in senior functions in European statistics for a quarter of a century, I can see that the existence of the CoP has enabled a great deal of progress to be made and conclude that the CoP has made a real difference to European statistics. Its existence and the concrete implementing measures have

significantly improved the quality of European statistics throughout the ESS, but shortcomings in a number of areas remain and need to be addressed.

Moreover, the world around us in general and the world of official statistics in particular do not stand still. The evolving environment of the data ecosystem will increasingly challenge the implementation of the CoP in the future. Therefore, the implementation of the CoP can never be totally complete, and any assessment has to be dynamic and forward-looking. The goal must be to make the ESS fit for the future. A static or even retrospective assessment would therefore be incomplete and unhelpful.

This has been the approach of ESGAB in its assessment and in the formulation of its recommendations. Taking all the above into account, ESGAB sees several areas where the implementation of the CoP could and should be (further) improved and presents in this annual report 28 concrete recommendations for improving the current and future implementation of the CoP in the ESS as a whole.

As the CoP has the purpose of reinforcing all aspects of the quality of the statistics ESS Members produce, and thus improving trust and confidence in ESS statistical authorities themselves, ESGAB's recommendations are formulated in such a way as to serve these

two purposes. For the sake of presentation, we have grouped the recommendations and their explanations into six areas, all of which are equally important for achieving the stated purposes.

Almost all recommendations refer to procedures or processes that already exist in (some) parts of the ESS, i.e. they are 'best practices'. They are formulated and need to be read with an eye to the future. Based on our expert views, we try to anticipate emerging challenges and identify the direction in which the future of official statistics might evolve. In this sense and in short, this annual report's recommendations are about 'best practices and best guesses'.

ESGAB hopes that the recommendations made in this 2023 Annual Report, if implemented across the ESS, will significantly help the ESS to produce high-quality official statistics for the EU, both now and in the future, in full compliance with the principles and the spirit of the CoP. This will strengthen confidence in these statistics and enable them to serve as a public good for society as a whole and for all the different user groups.

My special thanks go to the members of the team for providing their expert views and dedicated work for the production of this 2023 Annual Report. In this context, I should note that several members will be leaving ESGAB in 2024 at the end of their respective mandates. I thank all of them for their valuable contributions and their service to European statistics and the

European people. I will also be among those leaving ESGAB. A new chairperson will take over the lead of ESGAB, and several new members will join him, lending their expertise and time to European statistics. I wish them all the best for the challenges ahead, and every success in their important work.

I want to thank the Secretariat, provided by Eurostat, for the excellent support of our work. I also offer my sincere thanks to all those in the ESS and beyond who agreed to share their thoughts and experiences with ESGAB. Their contributions have been invaluable for our work.

I was privileged to be appointed by the European Parliament and Council to chair ESGAB for 3 years and I hope that with our reports and recommendations, we have achieved the purpose of ESGAB's existence, namely to enhance the professional independence, integrity and accountability of European statistics by providing an independent assessment of the ESS's implementation of the CoP and useful recommendations for further developing the ESS and thereby increasing confidence in European statistics.

However, as Antoine de Saint-Exupéry reminds us in 'The Little Prince', 'It is far more difficult to judge oneself than to judge others'.

Aurel Schubert  
Chair  
European Statistical Governance  
Advisory Board

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# EUROPEAN STATISTICAL ADVISORY BOARD



Aurel Schubert  
(Chairperson)



First row, from left to right:  
Kai Carstensen,  
Daniela Cocchi,  
Martine Durand (¹)



Second row:  
Andreas V. Georgiou,  
Priit Potisepp,  
Juan Manuel Rodríguez Poo

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<sup>1</sup> Martine Durand stepped down from her position on 5 November 2023.



ESGAB was established by the European Parliament and the Council of the European Union in 2008 to provide an independent overview of the European Statistical System with particular regard to the implementation of the European Statistics Code of Practice (CoP). ESGAB's aim is to enhance the professional independence, integrity and accountability of the ESS, and the quality of European statistics.

Its tasks include:

- preparing an annual report for the Parliament and the Council on the implementation of the CoP by the Commission (specifically Eurostat);
- undertaking an assessment of its implementation in the ESS as a whole;
- advising the Commission (Eurostat) on appropriate measures to facilitate the implementation of the CoP, communicate it to users and data providers, update it and, if necessary, answer questions relating to user confidence in European statistics.

Eurostat participates as an observer at the ESGAB meetings and the Commission covers ESGAB's administration and meeting expenses. ESGAB members receive no remuneration. ESGAB therefore has no operating budget.

For further details see:

<https://ec.europa.eu/esgab/>

# EXECUTIVE SUMMARY

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The 2023 Annual Report of the European Statistical Governance Advisory Board (ESGAB) assesses the implementation of the European Statistics Code of Practice (CoP) in the European Statistical System (ESS) as a whole. ESGAB's assessment is that the production of European statistics overall demonstrates a good level of implementation of the CoP. However, there are important areas where implementation of the CoP is not as strong as what it can and should be, and it ought to further improve. The evolving environment of the data ecosystem will increasingly present challenges to the implementation of the CoP in the future. In this context, ESGAB considers the implementation of the CoP in a dynamic and forward-looking way to render the ESS fit for the future. Taking all the above into account, ESGAB presents in this report 28 concrete recommendations for improving the implementation of the CoP in the ESS.

There is a need for improvement in the implementation of the CoP in various parts of the ESS –whether Eurostat, National Statistical Institutes (NSIs) or Other National Authorities

(ONAs)–and their respective institutional environments, often concerning certain aspects of the following areas: (i) professional independence, impartiality, and objectivity, (ii) statistical system development, (iii) access to administrative and privately held data sources, (iv) resource availability and management, (v) quality assurance of statistical processes and output, and (vi) user orientation and responsiveness. These topics have been used here to organise ESGAB's recommendations.

As far as topic 1, '**Professional independence, impartiality and objectivity**' is concerned, ESGAB has identified areas of needed improvements that affect various statistical producers in the ESS. In nearly all cases, the challenges need to be addressed by actors in the institutional environment, i.e. those in control of the legislative framework and the various institutional setups within which European statistics production takes place, and who also take discretionary actions that can affect the work of official statisticians. ESGAB strongly believes that getting legal frameworks and institutional set-ups right at both the EU and

national levels is necessary to be able to fully implement the CoP. The current weaknesses constitute a fundamental challenge that needs to be addressed.

ESGAB believes there is a need for amended legal frameworks and institutional setups regarding procedures for the recruitment/dismissal of heads of statistical producers and their specific responsibilities, as these are often inadequate. Appropriate law-provided processes and statistics-centred criteria and transparency are key and are further specified by ESGAB in this report. Similarly, it is important to provide for in the law that heads have sole responsibility for statistical decisions and for all matters regarding the internal management and budget execution of the statistical producer. While for the heads of NSIs and Eurostat this should be done with minimum delay, in the case of ONAs countries should commit to clear steps to be taken over the medium term. Responsibilities or participation of heads in activities outside the production of statistics that may involve, or give the appearance of, conflicts of interest should be barred. To buttress the independence and impartiality of ESS statistical producers, ESGAB also recommends that when these producers are part of policy institutions, laws should specify that their status differs in fundamental ways from that of other parts of these policy institutions. Over the medium term, explicit consideration should be given to the optimal institutional setting for a given European statistics producer and conclusions reflected in laws and institutional settings.

ESGAB reiterates its view that all users should have equal access to statistical releases of any European statistics producer at the same time, with no exceptions, and this should be provided for in law. Until this is achieved, there should be full transparency upfront in the affected statistical releases. To help address challenges by discretionary actions from the

institutional environment (which have continued to take place over the years), ESGAB is of the view that independent national bodies that monitor compliance with the CoP regarding the institutional environment for NSIs and ONAs should be established by law in all Member States, specifying that the members of these bodies should work solely in the interest of official statistics, and must be independent in fulfilling their function from political or any other interests. Furthermore, the political Commitments on Confidence in Statistics (CCSs) should be strengthened by amending Regulation (EC) No 223/2009 to strengthen the rules of formulation of CCSs and by the European Commission and Member States reviewing and recasting their existing CCSs.

As far as topic 2, '**Statistical system development**', is concerned, ESGAB believes that the further development of the ESS, both at the national and EU levels, is essential to guarantee compliance with all the principles of the CoP. To improve coordination and cooperation within a National Statistical System (NSS), which is currently usually inadequate, legislation should be strengthened on coordination and supervision of all ONAs by the NSI, on application of quality assurance in the whole NSS, on statistical work programmes for the entire NSS, and on the definition of the scope and purpose of official statistics. In addition, the division of labour between NSIs and ONAs should be reviewed and optimised, while heads of NSIs should always make available to ONAs national quality guidelines for European statistics and should monitor their implementation.

Statistical systems have to evolve, from systems focused mostly on surveys to systems that must be a mixture of surveys, administrative records and privately held data. This modernisation of official statistics brings opportunities and benefits, but also challenges. ESGAB makes

relevant recommendations, presented under topic 3, on access to administrative and private data sources. At the same time, there are new demands on NSIs to become stewards of government administrative data, which presents challenges to the implementation of various principles of the CoP. Therefore, ESGAB firmly believes that before data stewardship functions are established, national authorities must carry out a thorough analysis of the proper conditions for, and the implications of, such a change, and the legislative framework and the institutional settings must be strengthened appropriately to address the above challenges. ESGAB also recommends that a clear analysis be carried out of risks to statistical confidentiality that may arise from existing or new aspects of the production and dissemination of European statistics in a NSS and actions be taken to safeguard confidentiality.

To decisively advance coordination and development at the level of the ESS, ESGAB holds the view that Regulation (EC) No 223/2009 should be amended regarding access to private data and data-sharing within the ESS. The various legislative texts on these areas currently under discussion are in the direction of the recommendations of the *ESGAB 2022 Annual Report*, but should be further improved in accordance with the specific recommendations therein. The regulation should also reinforce the coordination functions of Eurostat and provide for Eurostat publicly and promptly making available any serious concerns for Member States' European statistics quality and disclosing any breaches of the CoP.

As far as topic 3, '**Access to administrative and privately held data sources**', is concerned, access of the ESS to such data is an increasingly important issue and is handled in very varied ways across the ESS, often inadequately. ESGAB strongly believes that sustained and long-term access of NSIs (and ONAs, if they

follow the CoP) to administrative data sources should be enshrined unambiguously in national laws across the ESS and the seniority of these provisions over conflicting laws should be ensured.

Similarly, ESGAB believes laws should provide NSIs and Eurostat access to and use of privately held data for statistical purposes, with data protection ensured by means of strict and transparent arrangements and protocols. Such protection of data is particularly important whenever records need to be linked because this entails, at least to some extent, the sharing of personal identifiers. ESGAB is fully aware of these challenges, but also emphasises the usefulness of record linkage for precisely defined and well-documented statistical purposes, and believes that laws should grant NSIs and Eurostat the right to process personal identifiers in order to allow record linkage. ESGAB clearly sees the need for European statistics producers to have sustained cooperation with academic and research institutions and for the establishment of a European Research Institute for Official Statistics (ERIOS). These are important levers for, inter alia, the innovation required to harvest the new data sources.

As far as topic 4, '**Resource availability and management**', is concerned, ESGAB observes that over the years, efficiency of statistical systems has increased, especially due to the development of computation technologies. Nevertheless, the need for high quality statistics and all that this entails, along with often tight fiscal situations for governments, have meant that the producers of official statistics have continuously faced a damaging shortage of financial, human and technical resources. The development of new statistics, accessing new data, setting up modern data platforms, customisation of statistical products and improved timeliness all require more resources.

In this challenging situation, ESGAB recommends that the statistical authorities of the ESS should treat retaining, attracting and developing professional staff as a strategic priority. They should also strive to update skills and expertise of staff in data management / data science to be able to address the fast-evolving needs of data production and dissemination. IT strategies and systems need to be kept under review and updates and investments in this area should be leveraged at the national and ESS levels to the extent possible. Synergies between statistical and academic institutions should be sought for in this context. Statistical authorities should continuously explore and deploy organisational, methodological and technical measures to improve efficiency of data collection and data processing and in order to free up resources for new activities. It is also extremely important that the responsible budgetary authorities back up production and innovation of European statistics with appropriate funding and the capacity of statistical producers to hire adequate numbers of new staff with the right qualifications.

In case of possible outsourcing of IT services, the statistical authorities should maintain decision-making powers in developing and running statistical IT systems so as not to jeopardise implementation of the CoP.

As far as topic 5, '**Quality assurance of statistical processes and output**', is concerned, the consistently high degree of implementation of the principles of the CoP relating to quality assurance of statistical processes and outputs are of distinguishing value for users of European statistics, especially in the current data ecosystem with the deluge of data of unclear provenance. In ESGAB's view, this has to be preserved and further improved, but must also be properly communicated to data users. ESGAB observes, however, that the current situation in the ESS is heterogenous, especially with ONAs often lagging behind the NSIs.

Thus, ESGAB believes there is a need for consistent compliance of both processes and outputs with the quality requirements of European statistics throughout the NSS, reinforced regularity and coverage of quality reviews, easily accessible and proactively promoted information on output and process quality, tailored to the common user and to the experienced user, and standardised production processes to appropriately lay the ground for development of new IT systems and the necessary quality assurance methods and tools.

Building on their positive experience of early estimates and experimental statistics, statistics producers should explore similar opportunities to improve timeliness of statistics. Moreover, problems in data coherence and consistency should be identified and reasons for revisions analysed and explained.

As far as topic 6, '**User orientation and responsiveness**', is concerned, official statistics producers must strive to increase their user orientation. They should engage in more systematic discussions with users through permanent consultative bodies to identify users' information needs, thus not only enhancing the relevance of official statistics, but also clearly differentiating the ESS from other data providers and promoting the brand of and trust in European statistics.

Procedures and ease of access to microdata for researchers are currently highly varied throughout the ESS. In ESGAB's view, more needs to be done to expand and facilitate the access of accredited researchers to such data, fully observing the principle of statistical confidentiality.

ESGAB encourages ESS members to review their communication and dissemination approaches in order to adequately serve all the different groups of users, according to their

diverse information needs, levels of statistical literacy and preferred channels of information access. Statistical literacy initiatives should support the distribution and reception of official statistics. Furthermore, to be professionally independent and to maintain credibility in the eyes of the users, it is important that members of the ESS publicly address criticisms of validated statistics and misuses of European statistics they produce. This is currently still lacking in many countries. ESGAB sees a need for a proactive and standardised procedure for how to identify and respond to such cases to strengthen the credibility of European statistics producers vis-à-vis the general public and contribute to discouraging further cases in the future.

Official statistics producers should provide possibilities for regular and unbiased user feedback. One tool for this are representative user satisfaction surveys that – in ESGAB’s view – should be conducted regularly, both at the national and EU levels.

ESGAB is convinced that the recommendations made in this report, if implemented throughout the ESS, will significantly help the ESS to produce high-quality official statistics on the EU, currently and in the future, in full conformity with the principles and the spirit of the CoP. This will support trust in such statistics and allow them to serve as a public good, for society as a whole and all the different user groups.

## RECOMMENDATIONS

**R1.** For the heads of NSIs and Eurostat, relevant laws should specify the following:

- (i) best practices for open competition and transparency in their recruitment, using clear professional criteria, among which statistical reputation and high level of competence in statistical matters are key;
- (ii) the reasons for their dismissal or transfer, which must not compromise their independence on statistical or internal management and budget execution, and that a reasoned decision be published;
- (iii) that they have sole responsibility for statistical decisions and for all matters regarding the internal management and budget execution of the statistical producer.

This recommendation should be implemented with minimum delay. Member States should also implement the principles of this recommendation in the case of ONAs, and commit to clear steps to be taken over the medium term (optimally in the context of a revised Commitment on Confidence in Statistics). This implementation may require changes in the institutional set-up of some ONAs.

**R2.** Regarding responsibilities of heads of European statistics producers (Eurostat, NSIs, ONAs) outside the production of statistics, relevant legal acts should bar responsibilities or participation in such activities that may involve, or give the appearance of, conflicts of interest.

**R3.** Relevant laws should specify that while the producers of European statistics may in some cases be part of policy institutions, their status should differ in fundamental ways from that of other parts of these institutions. They should provide that the relations between the rest of the policy institution and the statistics producer be based on respect of the professional independence of the latter with regard to all activities that affect the production and dissemination of statistics, including activities regarding internal management and budget execution relating to the statistics production process. Over the medium term, explicit consideration should be given to the optimal institutional setting for a given European statistics producer (Eurostat, NSI or ONA). Institutional dependence or administrative anchoring needs to be scrutinised and solutions reflected in laws and institutional settings.

**R4.** The best practice provided in the Code of Practice under the principle of impartiality and objectivity, namely 'All users have equal access to statistical releases at the same time', should be applied with no exceptions. This recommendation applies to NSIs, Eurostat and ONAs equally. Abstention from pre-release access should be explicitly and unambiguously provided for in law. Until this is achieved there should be full transparency upfront in the affected statistical releases.

**R5.** Independent national bodies that monitor compliance with the Code of Practice regarding the institutional environment for NSIs and ONAs should be established by law in all Member States. Laws should provide that the members of these bodies are selected with a transparent selection process from among experts with exceptional skills and national and/or international experience in matters relating to the Code of Practice. They should specify that members of such bodies work solely in the interest of official statistics and must be independent from political or any other interests in fulfilling their function. It should be provided that these bodies operate at arm's-length from other bodies, including policy bodies, NSIs and ONAs.

**R6.** The political Commitments on Confidence in Statistics (CCSs) should be strengthened. Regulation (EC) No 223/2009 should be modified to strengthen the rules of formulation of CCSs to be made by the policy side. The European Commission and Member States should review and recast their existing CCSs so as to more adequately support and further improve the implementation of the Code of Practice.

**R7.** To improve coordination and cooperation within the national statistical system, Member States should reinforce legislation on coordination and supervision by NSIs of all ONAs, on application of quality assurance in the whole NSS, on statistical work programmes for the entire NSS and on the definition of the scope and purpose of official statistics. In addition, the division of labour among

NSIs and ONAs and their respective institutional set-ups should be reviewed and optimised.

**R8.** Heads of NSIs should always make available to ONAs national guidelines to ensure quality in the development, production and dissemination of European statistics and should monitor their implementation and the quality of the statistics.

**R9.** With the new developments in the data ecosystem, inconsistencies may arise between the EU and the national legal frameworks affecting the Code of Practice principle on 'Mandate for data collection and access to data'. These would need to be identified early and pre-emptively addressed.

**R10.** Before data stewardship functions are established and roles are assigned, national authorities must carry out a thorough analysis of the proper conditions for, and the implications of, such a change. If the decision is made to proceed, the legislative framework and the institutional settings must be strengthened appropriately to buttress the implementation of the principles of official statistics that may face risks, such as professional independence, impartiality and objectivity, adequacy of resources, commitment to quality and statistical confidentiality. New systems that are being contemplated should, inter alia, be assessed on whether they would ensure clear separation between statistical and administrative activities, both in substance and in the eyes of the public.



**R11.** There must be a clear analysis of risks to statistical confidentiality that may arise from existing or new aspects of the production and dissemination of European statistics in a national statistical system and actions taken to safeguard confidentiality.

**R12.** To decisively advance coordination and development at the level of the ESS, Regulation (EC) No 223/2009 should be amended regarding access to private data and data sharing within the ESS. The proposal from the Commission and the reactions to this proposal from the co-legislators, which are in the direction of the recommendations of the ESGAB Annual Report 2022, should be further improved in accordance with the specific recommendations therein regarding (i) Eurostat's leading role, with accountability, in accessing privately held data and in involving NSIs in its processing; and (ii) Eurostat's leading role in setting up a new system of sharing the data of individual statistical units within the ESS with Eurostat itself as an accountable hub of sharing data among ESS statistical producers in an EU space. With a view to improving ESS coordination and development, the regulation should also be amended by providing for (i) Eurostat publicly and promptly making available any serious concerns for Member States' European statistics quality and disclosing any breaches of the European Statistics Code of Practice; and (ii) reinforcement of the coordination functions of Eurostat.

**R13.** ESGAB recommends that sustained and long-term access of NSIs to administrative data sources be enshrined unambiguously in national law and that the seniority of this legal provision above others be secured. In the case of ONAs, such access to administrative data sources should be granted if they adhere to the stipulations of the Code of Practice as they apply to the NSIs.

**R14.** ESGAB recommends that NSIs and Eurostat be provided with a legal mandate for the access and use of privately held data for statistical purposes. Such access should be based on clear long-term cooperation agreements. To ensure data protection, NSIs and Eurostat should set up appropriate and transparent arrangements and protocols.

**R15.** ESGAB recommends that the legislator grant NSIs and Eurostat the right to process personal identifiers, in order to allow record linkage for precisely defined and well-documented statistical purposes. In such cases, compliance with strict rules and protocols that guarantee data-protection needs to be ensured.

**R16.** ESGAB recommends that the members of the ESS be mandated and endowed with appropriate funds to closely cooperate with the research community. In particular, Eurostat should be mandated to set up and host a European Research Institute for Official Statistics (ERIOS).

**R17.** The statistical authorities of the ESS should treat retaining, attracting and developing professional staff as a strategic priority.

**R18.** The responsible budgetary authorities should back up production and innovation of European statistics with appropriate funding of operating costs and investments (IT investments in particular) to meet existing legal obligations and new data demands.

**R19.** The statistical authorities of the ESS should update skills and expertise of staff in data management / data science to be able to take up new data sources, develop and implement new methodologies and techniques of data collection, processing and dissemination. Synergies between statistical and academic institutions should be sought in this context.

**R20.** To further increase the efficiency of and innovate the production of statistics, the statistical authorities of the ESS should revise their IT strategies where appropriate. The authorities should keep the IT systems updated for the existing business, continue standardisation of statistical processes and further develop and leverage existing IT solutions into several statistical domains to the extent possible. Common ESS-wide IT solutions should be continuously explored and launched where feasible. Statistical authorities should continuously explore and deploy organisational, methodological and technical measures to improve efficiency of data collection and data processing and to free up resources for new activities.

**R21.** In case of outsourcing and centralisation of IT services, the statistical authorities should identify and manage corresponding risks. They should maintain necessary decision-making powers in developing and running statistical IT systems.

**R22.** European statistics producers should follow the quality requirements consistently and keep quality guidelines updated, especially when making use of new data sources (administrative and private ones). They should systematically carry out quality reviews of both statistical processes and outputs. In case of limited capacities, prioritisation of statistical domains should be undertaken.

**R23.** Statistical authorities should produce user-oriented quality reports and producer-oriented quality reports that are easily accessible, preferably based on ESS-wide metadata standards. Access to metadata and quality information therein should be promoted in statistical products. Quality reports submitted to Eurostat should be made public at the national and global levels. Quality measures and content of metadata should be proactively explained to users.

**R24.** Building on their positive experience of early estimates, European statistics producers should explore further similar opportunities to improve timeliness of European statistics. They should pursue systematic and regular dialogue among internal units, as well as with experienced users of statistics, to identify any problems in data coherence and consistency. The reasons for and results of revisions should be clearly explained to users.

**R25.** ESGAB recommends that in all Member States and at the EU level, institutionalised, permanent user consultation bodies and processes be established and actively used, thus helping to identify the most up-to-date needs for statistical information (including the best means for its dissemination) of a very large and diverse community of users.

**R26.** ESGAB recommends putting harmonised rules and procedures in place throughout the ESS for easy access by properly accredited researchers to disaggregated data and microdata, including databases derived from registers and private sources. Adequate methods for linking different datasets should be developed and the results provided to accredited researchers if there is consent of statistical units for such data reuse. Strict rules and protocols that guarantee statistical confidentiality need to be in place.

**R27.** ESGAB recommends that the ESS members review their dissemination and communication practices using, inter alia, feedback and views received from users, with the goal of adequately serving all the different user types/groups, considering their diverse information needs, levels of statistical literacy and preferred channels of information access. Initiatives to enhance statistical literacy should be initiated and pursued to reach and serve new user groups.

**R28.** ESGAB recommends that the ESS members create adequate possibilities for users to regularly provide feedback on the statistics produced and disseminated. Surveys should be conducted that are both representative and comparable over time. In this regard, EU surveys on the public's trust in official statistics should also be regularly conducted, for instance using the well-established Eurobarometer.

# 1. THE IMPLEMENTATION OF THE EUROPEAN STATISTICS CODE OF PRACTICE AND AREAS FOR IMPROVEMENT

## 1.1 INTRODUCTION

The 2023 Annual Report of the European Statistical Governance Advisory Board (ESGAB) assesses the implementation of the European Statistics Code of Practice (CoP) in the European Statistical System (ESS) as a whole. ESGAB's assessment is that the production of European statistics overall demonstrates a good level of implementation of the CoP. However, there are important areas where implementation of the CoP is not as strong as it can and should be, and it ought to further improve.

Section 1.2 in this chapter provides the context of ESGAB's assessment via a broad overview of the evolving environment and its challenges to the implementation of the CoP. Section 1.3 presents ESGAB's overall assessment of the implementation of the CoP in the ESS, while Section 1.4 offers more specific assessments of the implementation of the CoP, grouped into six specific thematical areas where ESGAB identifies needs for improvements. Concrete recommendations accompany the analysis. A brief description of the tasks that are legally entrusted to ESGAB when preparing its annual report and of the sources and modalities of work used to prepare the present report are

presented in a box in Chapter 1. Chapter 2 deals with ESGAB's assessment of the implementation of the CoP in six specific thematic areas.

### MANDATE OF ESGAB AND MODALITIES OF WORK

According to the relevant EU law, Decision No 235/2008/EC, Article 2 (2), 'the purpose of the Board shall be to provide an independent overview of the European Statistical System as regards the implementation of the European Statistics Code of Practice [hereinafter referred to as the Code of Practice]. The Board's tasks shall be to prepare an annual report for the European Parliament and the Council on the implementation of the Code of Practice insofar as it relates to the Commission (Eurostat) ... [and] include in that annual report an assessment of the implementation of the Code of Practice in the European Statistical System as a whole.'

<sup>2</sup> Decision No 235/2008/EC of the European Parliament and of the Council of 11 March 2008 establishing the European Statistical Governance Advisory Board [OJ L 73, 15.3.2008, pp. 17–19, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:073:0017:0019:EN:PDF>].

In observance of the law, ESGAB has produced the present report working independently, perusing all relevant information available to it and making its own assessment on relevant matters. The modalities of work it followed were as follows:

ESGAB carried out its investigations regarding implementation of the principles in the CoP. These included a close reading of the published reports on ESS peer reviews – the recent round <sup>(3)</sup> and earlier rounds, for comparison – along with the separate collection of information through confidential discussions with important stakeholders in European statistics and other interested parties. It also included the use of information from the public domain and information available to ESGAB that may not have been in the public domain.

In producing the present report, ESGAB made use of the work that it had already carried out for the 2021 <sup>(4)</sup> and 2022 <sup>(5)</sup> reports, along with earlier ESGAB reports. The 2021 report pertained to the peer review of Eurostat, and as ‘the implementation of the Code of Practice insofar as it relates to the Commission (Eurostat)’ is a major part of the ESGAB annual report required by law, ESGAB has built on and followed up on its 2021 peer review of Eurostat.

The 2022 report dealt with potential amendments to the statistical law of the EU (Regulation (EC) No 223/2009) and to the Commitment on Confidence in Statistics (CCS) of the European Commission. ESGAB had looked at the regulation from the point of view of its mandate: assessing the

implementation of the CoP in the ESS and drawing conclusions on what needs to be done regarding the legal framework for that implementation to improve, both now and in the future. In all the recommendations regarding the regulation, there were explicit or implicit assessments of implementation of various aspects of the CoP in the production of European statistics. The same holds for the work ESGAB had carried out in the context of its opinion on the Commission’s CCS.

These assessments were followed up and built on for the purpose of the present report. ESGAB also drew on its assessment of the July 2023 Commission legislative proposal for an amendment of the regulation, which ESGAB summarised in its September 2023 opinion <sup>(6)</sup> on the matter.

Information presented and views expressed in the two last ESGAB reports were naturally used in deriving the assessment needed to be made in the present report about the state of implementation of the principles of the CoP regarding the ESS, Eurostat, National Statistical Institutes (NSIs) and Other National Authorities (ONAs). At the same time, new information accessed through the above noted investigations, including on very recent developments in the production of European statistics, were also considered in producing the present report.

ESGAB also explored how the rapidly evolving environment of the data ecosystem and the increased demands on official statistics are already generating numerous novel challenges for the ESS and how this is reflected in the needs for improved implementation of the CoP.

<sup>3</sup> The third round of peer reviews took place between about 2021 and 2023, covering the whole ESS, i.e. Eurostat and all NSIs of the EU and EFTA countries, <https://ec.europa.eu/eurostat/web/quality/peer-reviews/current-round-2021-2023>.

<sup>4</sup> <https://ec.europa.eu/eurostat/documents/34693/14172844/2021+ESGAB+Annual+Report.pdf/db14138c-59ae-ec6e-5c2c-8e203cb58d9d?t=1642539150270>.

<sup>5</sup> <https://ec.europa.eu/eurostat/documents/34693/16235793/ESGAB-2022-annual-report.pdf/54b14c23-94f6-66a4-b57e-1ce851ba0005?t=1678098290756>.

<sup>6</sup> <https://ec.europa.eu/eurostat/documents/34693/13394167/ESGAB+Doc.+2023+%2832+%29+-+Opinion+Regulation+223+.pdf/958707d5-c8b6-24cd-190d-bf6792e2e553?t=1694009178987>.

## 1.2 THE EVOLVING ENVIRONMENT'S CHALLENGES TO THE IMPLEMENTATION OF THE CODE OF PRACTICE

There is no doubt that the evolving environment of the new data ecosystem must be considered when assessing whether the CoP is being implemented, since the environment presents new challenges and contexts to the current implementation of the CoP. Moreover, ESGAB is of the view that the evolving environment will increasingly present challenges to the implementation of the CoP in the future. The present report notes serious implications for that implementation. ESGAB presents some of these new challenges ordered by the principles of the CoP affected/concerned, although it should be noted that some challenges affect a range of statistical principles simultaneously.

Traditional and novel challenges are discussed in the following sub-headings.

### PROFESSIONAL INDEPENDENCE, IMPARTIALITY AND OBJECTIVITY

- The role and importance of statistics for policymaking and policy evaluation have been increasing worldwide, including of course in the EU and its Member States. The UN Sustainable Development Goals (SDGs), the Stability and Growth Pact, the Excessive Deficit Procedure and the Macroeconomic Imbalances Procedure of the EU are just some examples of this development. As statistics become more relevant as yardsticks for the achievement of policy goals and for purposes of comparison across countries or across time, 'novel' challenges for the independence, impartiality and objectivity of official statistics producers can and do arise and they add to 'traditional' challenges in these areas. Due to their possible repercussions on the quality of and trust in official statistics, all these challenges need to be closely monitored and decisively addressed.

- Traditional challenges related to the 'independence, integrity and accountability of the national and Community statistical authorities' <sup>(7)</sup> have been from the beginning a *raison d'être* for the existence of the CoP (and of ESGAB). They can put at real risk the quality of official statistics and thus the 'trust and confidence' <sup>(8)</sup> in them. Such challenges continue to exist in some instances, for example as pressure on official statistics producers to take into account policy goals and policy perspectives in the production of high-visibility and high-stakes statistics on economic and social developments, or as adoption of politically self-serving and erroneous interpretations of CoP principles. Addressing such challenges is an enabling condition for also addressing the novel challenges emerging on account of the evolving environment as discussed below, as *inter alia*, this is necessary for securing the 'brand' of official statistics as principles-based statistics.
- Novel challenges regarding independence, impartiality and objectivity emerge, for example as the role of the NSIs in the evolving data ecosystem is being rethought by the political leadership and the policy side in general. For instance, the demands for NSIs to become stewards of government administrative data raise some questions <sup>(9)</sup>. In some national legislations, the NSI already appears as the data steward of the national data ecosystem, whereas in other countries this task is assigned to other institutions. One way or another,

<sup>7</sup> Decision No 235/2008/EC of the European Parliament and of the Council of 11 March 2008 establishing the European Statistical Governance Advisory Board, Recital 3.

<sup>8</sup> See footnote <sup>(7)</sup>, Recital 2.

<sup>9</sup> For example, data stewardship is often understood as involving, *inter alia*, maintaining the accuracy of the data under stewardship and ensuring the proper implementation of rules and regulations for using the data. Questions would arise whether an NSI acting as a data steward of a ministry's data would be able to act independently and impartially to implement the above goals and not have to compromise its standards if there was pressure from the ministry that owns the specific administrative data. Even if the NSI could resist pressures from the ministry and enforce the standards, there could still be doubts in the eyes of the public and reputational risks for the NSI and for the actual official statistics the NSI produces.

challenges can emerge from this regarding professional independence, impartiality and objectivity, and potentially also for statistical confidentiality and adequacy of resources.

- There are potentially important issues regarding the role of Artificial Intelligence (AI), not only for technical statistical production processes but also for independence, impartiality and objectivity<sup>(10)</sup>. The area of AI and its applications are developing extremely fast, and it is imperative to stay on top of developments and try to anticipate problems from the use of AI in the production of official statistics.
- Governments, through ONAs or other entities, sometimes produce statistics-like products that do not meet the quality requirements and generally the principles of the CoP. This is a challenge, as it can indirectly affect the conditions for independence and impartiality of NSIs and other statistical producers in the NSS.
- Statistical systems are evolving quickly, from systems focused mostly on surveys to systems that use a mixture of surveys, administrative records and privately held data. While these changes have meant a notable modernisation of official statistics, they can also introduce challenges, inter alia in the effective implementation by NSIs and ONAs of the principles of independence, impartiality and objectivity in their production of European statistics<sup>(11)</sup>.

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<sup>10</sup> For example, it should be clear that there would be massive risks if AI were given the capacity, directly or indirectly, to make decisions on the implementation of statistical principles/ethics in a NSI or an ONA. Even using AI in 'technical' tasks – if some could be defined – could be risky, for example on account of AI's tendency to 'hallucinate' and the lack of 'knowability' of how it arrives at conclusions.

<sup>11</sup> For example, increasing reliance on administrative and private data sources involves the risk that decisions for the 'downstream' official statistics are de facto increasingly in the hands of state or private actors that may use the data inputs they provide to serve non-statistical interests, with limited possibility on the part of official statistics producers for checking the quality of the data inputs.

## MANDATE FOR DATA COLLECTION AND ACCESS TO DATA

- The availability of big data mostly in private hands is putting to the test the mandate of European statistics producers for data collection and access to data. This presents an even more challenging test than the test regarding access to administrative data for the production of European statistics – which, after several decades, is still often not adequately met. The dynamics of the needed change in the mixture in data sources are a cause of concern. Inadequate access to the increasingly important private and administrative data sources will progressively impair various aspects of the quality of official statistics, including their coverage, granularity and timeliness.
- Changes in the EU legal framework in the context of what is known as the European data strategy (Data Act, Data Governance Act) are aimed at creating a strong data industry in the EU that can compete with the large overseas operators. In all these regulations, official statistics appear in a very residual way and many restrictions are established, especially in the Data Act, to the free access by NSIs to privately held data, thus affecting the implementation of the principle of mandate for data collection and access to data for the production of official statistics. Furthermore, any access to privately held data for official statistics can create new and unanticipated challenges to statistical confidentiality, and also raise various issues of adequacy of resources and even of independence, impartiality and objectivity.

## ADEQUACY OF RESOURCES

- In the new data world, financial, human and technical resources for European statistics producers are generally becoming both more acutely needed and more difficult to acquire, given competition for these resources. Adequacy of these resources is essential to statistics producers to be effective (produce relevant data) and efficient.
- The needs for technical qualifications of the staff working in official statistics producers and the technology used in their production processes are evolving. The technical qualifications of staff that will fit the emerging new environment will be more oriented towards database management, linkage techniques and statistical learning than towards expertise in inferential statistics.
- In this changing environment, it becomes increasingly important for European statistics to be able to take up new data sources (and potentially pay for them) and to develop new, or to thoroughly update, data production and dissemination processes. Besides adequate financial, human and technical resources, constant work by leaders on high-level strategic vision is required, along with a willingness to appropriately experiment. Encouraging leadership and supporting organisational culture in statistics producers are strategic enablers to adapt to the changing environment.

## COMMITMENT TO QUALITY

- The serious competition faced by European statistics producers comes from private producers of statistics-type information, who by-and-large do not meet the quality criteria outlined in the CoP. The risks to the maintenance of the quality standards of European statistics increase as this competition intensifies and pressures rise

to meet the competitors' challenge on their own terms. The same holds for statistics-type information being produced increasingly by government / public agencies in areas traditionally reserved for NSIs and other producers of European statistics. Choices are thus increasingly arising for European statistics producers to either 'cut corners' and 'reprioritise' or to markedly improve their performance while maintaining full adherence to the CoP, building on their strongest assets and highlighting their difference from competing sources of information.

- The proper quality assessment and processing of new types of primary data that are on a path to dominate as data sources of the official statistics production process – privately- owned data and administrative data – takes time. In addition, this requires a systematic approach and involves notable organisational, technical and legal abilities, along with clarity, on the part of both official statisticians and the public at large, on ethical statistical practices.

## STATISTICAL CONFIDENTIALITY AND DATA PROTECTION

- The rapidly expanding data world is making data subjects more worried about their basic rights to privacy and to confidentiality of their individual or business data, along with transparency of use of their data. In addition, there are increasing risks to protecting statistical confidentiality in the context of proliferating databases outside European statistics producers that can be used, potentially in conjunction with data received from European statistics producers, to identify statistical units.
- Confidentiality concerns may also arise from the different roles that national statistical offices are increasingly asked to play as stewards of government administrative data



in some Member States or in more limited forms of collaboration involving, for example, assisting with the processing of administrative data. Furthermore, various arrangements involving shared IT systems between statistical producers and other government agencies can raise real or reputational risks for European statistics producers regarding statistical confidentiality.

### **SOUND METHODOLOGY AND APPROPRIATE STATISTICAL PROCEDURES**

- European statistics producers need to be able to appropriately access the available and evolving professional expertise of the academic and research community in improving the effectiveness and efficiency of official statistics. Such collaboration also facilitates in various ways the hiring of new staff, competent in the skills needed in the new data environment. At the same time, academics and researchers create value for society out of the official statistics by properly accessing the rich amount of granular data and microdata stored by ESS statistical producers.
- The rapid rate of incorporation of AI in society is bound to affect official statistical production. There are potentially important issues regarding the role of AI in both technical statistical production processes and statistical governance, some of which may be difficult to fathom but for which there is a need to prepare, to the extent possible, in order to respect the CoP.

### **NON-EXCESSIVE BURDEN OF RESPONDENTS AND COST EFFECTIVENESS**

- The importance of citizens and companies as main direct information providers for official statistics through, for example, statistical surveys, is decreasing as the response rates continue their long-term secular

decline. Instead, official statistics producers (NSIs and ONAs) take this information from administrative records and private databases. In this context, the production process of official statistics (and critical decisions about it) can end up taking place partly outside the official statistics producer, either in the public sector (administrative records) or in the private sector (e.g. big data), with significant issues for, inter alia, governance and quality that need to be addressed.

### **ACCESSIBILITY AND CLARITY**

- User needs are evolving, with timeliness, new areas of information needs, data platform accessibility and customisation of statistical information rising in the list of user priorities. Private data owners and, increasingly, public sector providers of statistical information, are aiming to satisfy these increased user needs. Timeliness, new statistics, modern data platforms and customisation are challenges for European statistics that require financial, human and technical resources. In addition, the information providers in the digital world tend to move faster than well-rooted, comprehensive statistical systems.

The rapidly evolving environment of the data ecosystem and the increasing demands on official statistics call on the ESS to be compliant not only with the current wording of the CoP, but very importantly also with the spirit and intentions of the CoP in order to be prepared for the future.

ESGAB has also considered the question of whether the wording in the CoP needs to be updated in certain places to facilitate its implementation in the rapidly evolving environment.

### 1.3 OVERALL ASSESSMENT

- The production of European statistics overall demonstrates a good level of implementation of the CoP. Progress has been achieved during the past 18 years (since the adoption of the CoP) and this has made a difference for European statistics. However, there are important areas where implementation is not as strong as it could and should be, and ought to further improve.
- There is a need for improvement in the implementation of the CoP in various parts of the ESS (whether Eurostat, NSIs or ONAs) and their respective institutional environments, often concerning certain aspects of the following areas (which, for simplicity, are grouped into six thematical areas following their order of appearance in the CoP).
  - › **Professional independence, impartiality and objectivity.** A need for amended legal frameworks and institutional set-ups regarding procedures for recruitment/ dismissal of heads of statistical producers and their specific responsibilities; the independence of official statistics producers; impartiality of access to statistical releases; independent national bodies to monitor the CoP institutional environment principles; and political Commitments on Confidence in Statistics (CCS). Moreover, a need for reviewing and recasting existing commitments.
  - › **Statistical system development.** A need for legislation on coordination by NSIs of all ONAs, the NSS statistical work programme and the definition of official statistics; provision of national quality guidelines by NSIs and monitoring of their implementation; review of the division of labour within the NSS; pre-emptively addressing inconsistencies in laws affecting data collection and access to data; analysis of risks of data stewardship before adoption of the latter; analysis of new and existing risks to statistical confidentiality; amendment of Regulation (EC) No 223/2009 on access to private data and to data sharing within the ESS with Eurostat in a leading role, on Eurostat's appropriate handling of concerns for the quality of statistics and on the coordination functions of Eurostat.
  - › **Access to administrative and privately held data sources.** A need for legal provisions regarding adequate access of European statistics producers to all relevant data sources (administrative and privately held), including personal identifiers used for record linkage, while safeguarding statistical confidentiality and for ensuring the seniority of these provisions over conflicting laws; a need for European statistics producers achieving a sustained cooperation with academic and research institutions and for a European Research Institute for Official Statistics (ERIOS), both as levers for, inter alia, innovation in harvesting the new data sources.
  - › **Resource availability and management.** A need for endowing European statistics producers with adequate resources and for ensuring their efficient and effective employment to retain and attract staff with appropriate skills and expertise; developing new IT systems and leveraging these investments at the national and ESS levels; and deploying resources to research and cooperating with academic institutions.

- › **Quality assurance of statistical processes and outputs.** A need for consistent compliance of both processes and outputs with the quality requirements of European statistics throughout the NSS; reinforced regularity and coverage of quality reviews; easily accessible and proactively promoted information on output and process quality; standardised production processes to appropriately lay the ground for development of new IT systems and the necessary quality assurance methods and tools.
- › **User orientation and responsiveness: relevance, timeliness and accessibility.** A need for establishing and actively using institutionalised user consultation bodies to identify needs for statistical information and preferred information channels of the very large and diverse community of users; harmonising rules and procedures in place throughout the ESS for easy but accredited access to microdata derived from various sources while safeguarding statistical confidentiality; suitably reacting to (undue) criticism and misuse of statistics; enhancing statistical literacy initiatives; and creating the possibilities, via appropriately constructed surveys, for the regular collection of feedback from users.
- While ESGAB is of the view that some parts of the ESS and their corresponding institutional environments may be satisfactorily implementing a given area of the CoP, the same satisfactory level of implementation of the given area does not apply to other parts of the ESS and their institutional environments, and some have demonstrated a need for significant improvement. When such heterogeneity was deemed high enough and/or occurrences of weakness were deemed significant enough, ESGAB considered it necessary to include the thematic area in the list (above) where improvement is needed in the implementation of the CoP in the ESS as a whole (and not only in some isolated cases).
- The rapidly evolving environment of the data ecosystem and the increased demands on official statistics generate numerous present and future challenges for the ESS that require rapid action, in order to have compliance not only with the wording but, very importantly, also with the spirit and intentions of the CoP ('fit for the future')<sup>[12]</sup>. Thus, even parts of the ESS and their institutional environment that have not faced adverse phenomena from their current institutional settings and/or practices must constantly review and adjust these aspects so as to maintain a high level of compliance with the principles of official statistics. The rapidly changing environment may very well cause latent weaknesses to surface and these have to be addressed pre-emptively, tackling existing and emerging challenges. In addition, any emergence of adverse phenomena in some part of the ESS and corresponding institutional environment can raise questions about other parts – i.e. they can be subject to a form of contagion – and this is an additional reason for all parts of the ESS to strive for best practices<sup>[13]</sup>.
- Decisively addressing the six areas of needed further progress identified in the present ESGAB report would strengthen the 'brand' of European statistics within a very competitive and fast-evolving data ecosystem. There are many risks for virtually all types of users of the ubiquitously available statistics-

<sup>12</sup> ESGAB's assessment and recommendations have to be seen in this light. The approach taken is consistent with the recommendations formulated in ESGAB's 2021 and 2022 annual reports.

<sup>13</sup> This has been part of the logic behind the creation and adoption of the CoP itself in 2005, following various difficulties in parts of the ESS in the period leading up to the adoption of the code.

like information in this data ecosystem. In this environment, the 'brand' of European statistics, as principles-based statistics that are independent, impartial and highly reliable statistical information about the EU, is essential and needs to be reinforced. This is important both for the common good in the EU and for the continuing relevance – if not their persistence and survival in the face of competing sources of information – of European statistics.

- To be successful in this new digital world, with the new data demands and the new data ecosystem, the ESS needs to concentrate on improvements in a few key areas. These areas are very much interlinked, and progress needs to be made everywhere in parallel to really make the system strong for the future. For analytical and presentational purposes, ESGAB groups the requirements into the six areas named above.

# 2. ASSESSMENTS OF THE IMPLEMENTATION OF THE EUROPEAN STATISTICS CODE OF PRACTICE BY THEMATIC AREA

## 2.1 PROFESSIONAL INDEPENDENCE, IMPARTIALITY AND OBJECTIVITY

### 2.1.1 INTRODUCTION

ESGAB has identified areas of needed improvement relating to the environment for professional independence, impartiality and objectivity that affect various statistical producers in the ESS and ought to be addressed. In nearly all cases, the challenges need to be addressed by actors in the institutional environment of the statistical producers and not by the statistical producers themselves. These actors are in control of the legislative framework and the various institutional setups within which European statistics production takes place and they also take discretionary actions that can affect the work of official statisticians. All these matters are crucial to the implementation of the CoP.

## 2.1.2 CHALLENGES ON ACCOUNT OF LEGISLATIVE FRAMEWORKS AND INSTITUTIONAL SETUPS

ESGAB strongly believes that getting the legislative frameworks right at both the EU and national levels is necessary for fully implementing the CoP. The current weaknesses in such legal frameworks constitute a fundamental challenge to the implementation of the CoP. This was already pointed out in the ESGAB Annual Report 2022 in discussing 'governance' provisions in Regulation (EC) No 223/2009 and crucial remedies were proposed in this regard <sup>[14]</sup>. In addition, there is a need for various Member States to update their national statistical laws regarding such matters. Moreover, it is necessary to critically review and, where needed, modify the institutional set-up for any given producer of European statistics in order to improve the conditions for the implementation of the CoP.

<sup>14</sup> <https://ec.europa.eu/eurostat/documents/34693/16235793/ESGAB-2022-annual-report.pdf/54b14c23-94f6-66a4-b57e-1ce851ba0005?t=1678098290756>.

## PROCEDURES FOR RECRUITMENT AND DISMISSAL OF THE HEADS OF STATISTICAL PRODUCERS IN THE ESS AND THEIR RESPONSIBILITIES

### *Recruitment and dismissal of heads*

There is a need to amend the EU statistical law and a number of national laws in order to render procedures for recruitment and dismissal of heads of statistical producers in the ESS more supportive of the professional independence of such heads, and thus of the European statistics producers they head. Currently, these are often inadequate. Procedures should be according to international best practices. They ought to emphasise open competition and transparency in the recruitment (including selection and appointment). Moreover, recruitment should be made only on the basis of clear professional criteria, among which statistical reputation and a high level of competence in statistical matters are key. In addition, the reasons for the dismissal of heads of official statistics producers or their transfer to another position should be specified in law. They must not include reasons compromising the head's professional or scientific independence or their internal management and budget responsibilities. Transparency regarding any dismissal or transfer of the head of a statistics producer should be ensured by making public a reasoned decision <sup>(15)</sup>.

In this report – as in the previous ones – ESGAB reiterates the importance of the requirements regarding the procedures for recruitment and dismissal of the heads of National Statistical Institutes (NSIs) and Eurostat (and

their responsibilities; see below) in order to safeguard the independence, impartiality and objectivity of these members of the ESS. Another issue that ESGAB would like to highlight in the present report concerns ONAs in the ESS. The safest way to produce high-quality and trusted European statistics is for all their producers (whether Eurostat, NSIs or ONAs) to meet certain standards regarding the conditions that support the implementation of the principles of the CoP. At the same time, it is a fact that particularly ONAs very often lag behind in this respect. It is thus important for the quality of and trust in European statistics that the above-noted law-provided procedures for recruitment and dismissal apply in the same way to the statistical heads of ONAs as to the heads of Eurostat and NSIs. Such procedures should be put in place for Eurostat and NSIs and implemented with minimum delay. In the case of ONAs, given the greater diversity of their current circumstances and their large number, Member States should commit to providing in law and applying in practice such procedures. They should commit to clear steps in this area, to be taken over the medium term. Such commitments should optimally take place in the context of revised CCSs.

### *Responsibilities of heads*

Article 5a of Regulation (EC) No 223/2009 on European statistics is quite clear on responsibilities of the head of the NSI inside the NSI. They have sole responsibility for statistical decisions and for all matters regarding the internal management and budget execution of the NSI <sup>(16)</sup>. However, the situation in various national statistical laws is not fully in accord with the above and should be aligned with it to help fully implement the word and spirit of

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<sup>15</sup> The analysis in ESGAB's 2022 annual report and its Recommendations 10 and 11 therein inform the analysis and recommendation made in the present report regarding recruitment and dismissal of heads of statistical producers. The reader is referred to them for more specifics.

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<sup>16</sup> See Article 5a. 2, and in particular items a, b and d, of Regulation (EC) No 223/2009

the CoP. It is important that the responsibility refers not only to statistical matters, but also to internal management/administrative matters of the NSI and to budget execution.

In the specific case of the head (Director-General) of Eurostat, there is a need for Regulation (EC) No 223/2009 to be amended so that they shall be responsible and accountable not only for all statistical activities, but also for matters regarding Eurostat's internal management and budget execution (see *ESGAB Annual Report 2022*, Recommendation 10).

The statistical heads of ONAs need a similar specification in both European and national law for their responsibilities as the specification in Regulation (EC) No 223/2009 for the heads of NSIs. A perennial and widespread vulnerability in NSSs, up to the present day, is constituted by issues regarding the conditions for the professional independence, impartiality and objectivity in statistical matters of the ONAs. Given that these European statistics producers often produce upstream data subsequently used by NSIs, improvements in this area would also reduce risks to accuracy and reliability and to overall quality of the downstream statistics produced by NSIs. Improvements would also reduce reputational risks for NSIs due to contagion.

Regarding potential responsibilities of heads of European statistics producers outside the production of statistics, potential risks to the implementation of the principles of independence, impartiality and objectivity need to be taken into account. Participation of the head of an official statistics producer (whether NSI, ONA or Eurostat) in external activities or bodies (including in the executive and legislative branches of government) may be incompatible with the requirements of the role of head of the European statistics

producer if it introduces conflicts of interest and nonstatistical considerations in statistical decisions. Trust of the public in the European statistics produced would also be affected by any appearance<sup>(17)</sup> of a conflict of interest.

Thus, to strengthen the conditions for a full implementation of the CoP, legal frameworks should clearly specify that responsibilities or participation in activities outside the production of European statistics that may involve conflicts of interest – or give the appearance of conflicts – are not acceptable. Participation is welcomed in external activities that facilitate government and other users to identify 'what' statistics would best serve their needs and could be produced by the statistical producers, leaving 'how' the statistics are produced and the numbers in the statistics – the 'how much' – to the statistical producers.

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<sup>17</sup> An appearance of a conflict of interest exists, for example, when a staff member (including the head) of a statistical producer is involved in a matter with specific parties from outside official statistics production and the circumstances are such that a reasonable person would think that, on account of the said involvement, the staff's impartiality could be compromised and, more generally, that there could be improper influence on the performance of their duties and responsibilities inside the statistical producer.

**R1.** For the heads of NSIs and Eurostat, relevant laws should specify the following:

- (i) best practices for open competition and transparency in their recruitment, using clear professional criteria, among which statistical reputation and high level of competence in statistical matters are key;
- (ii) the reasons for their dismissal or transfer, which must not compromise their independence on statistical or internal management and budget execution, and that a reasoned decision be published;
- (iii) that they have sole responsibility for statistical decisions and for all matters regarding the internal management and budget execution of the statistical producer.

This recommendation should be implemented with minimum delay. Member States should also implement the principles of this recommendation in the case of ONAs, and commit to clear steps to be taken over the medium term (optimally in the context of a revised Commitment on Confidence in Statistics). This implementation may require changes in the institutional set-up of some ONAs.

**R2.** Regarding responsibilities of heads of European statistics producers (Eurostat, NSIs, ONAs) outside the production of statistics, relevant legal acts should bar responsibilities or participation in such activities that may involve, or give the appearance of, conflicts of interest.

### INDEPENDENCE OF OFFICIAL STATISTICS PRODUCERS IN THE ESS

Regarding the strengthening of professional independence in all statistical authorities in the ESS, there are certain considerations regarding the legal frameworks and the institutional setups.

Consistently with Article 338 of the Treaty on the Functioning of the European Union, ESS statistics producers – Eurostat, NSIs and ONAs – as producers of European statistics have to be of service to their Member States (where applicable) but also to the EU as a whole by developing, producing and disseminating European statistics, which are an EU-level public good, acting with independence, impartiality and objectivity.

To fully implement these principles, Eurostat, the NSIs and ONAs should not be involved in implementing the political guidelines<sup>(18)</sup> of any policy, regulatory or administrative departments and bodies. Being involved in such matters creates risks (associated with conflicts of interest) for the implementation of the CoP. Thus, when the producers of European statistics are part of policy institutions, their status should differ in fundamental ways from that of other parts of these policy institutions

<sup>18</sup> This should not be confused with the wholly legitimate directions by branches of government to official statistics producers of 'what' official statistics would need to be produced to best serve society (leaving 'how' the statistics are produced and the numbers in the statistics – the 'how much' – to the statistical producers).



and this should be enshrined in law (making it also more credible to the public). The law should provide that the relations between the rest of the policy institution and the European statistics producer that may be part of that institution ought to be based on respect of the professional independence of the statistics producer with regard to all activities that affect directly or indirectly the development, production and dissemination of European statistics, including decisions on matters regarding the internal management of the statistics producer.

Strengthening the professional independence, impartiality and objectivity in all statistical authorities in the ESS requires to explicitly consider which institutional setup is optimal for a given European statistics producer (Eurostat, NSI or ONA). Should it be an independent authority outside policy bodies or be part of a policy body with some smaller or greater degree of amalgamation with it? Below are some aspects to consider regarding this complex issue [19].

In the view of ESGAB, as noted above, an important condition for the implementation of the principles of the CoP would be an institutional/administrative setting for any producer of European statistics (NSI, ONA or Eurostat) that ensures that what Regulation (EC) No 223/2009 requires for the heads of NSIs also applies for its head, i.e. that they have the sole responsibility for statistical decisions and for all matters regarding the internal management and budget execution of the statistical producer. However, such jurisdictional authority and independence for a statistical head is inherently in contradiction with

having a political or administrative supervisor, who is the superior of the statistical head in the hierarchy of the respective institution, and could have, inter alia, control over the position, career advancement and remuneration matters regarding the statistical head. Yet, the presence of such a political supervisor and superior is unavoidable if the statistics producer is tethered administratively/hierarchically to a policy institution – and even more so if amalgamated in it.

The institutional settings of various statistics producers in the ESS could at some point undermine the implementation of major [20] principles in the CoP and affect the perception of the public about these matters. This perception is critical given the pressing need of European statistics to support and not undermine the ‘brand’ they aim to maintain and reinforce principles-based statistics – independent, impartial, objective and of high quality. This ‘brand’ is claimed to be their fundamental advantage over all other competing sources of information in this new data-rich and data-driven world. Thus, issues of institutional dependence / ‘administrative anchoring’ (for Eurostat, an NSI or an ONA) need to be scrutinised going forward and solutions ought to be found and reflected in legal frameworks and institutional settings [21].

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<sup>19</sup> The issue of institutional dependence or ‘administrative anchoring’ of official statistics producers is not an easy one, as such dependence/anchoring has been part of the genesis and centuries-long history of production of official statistics. However, the issue needs to be reflected upon in the modern context, given that it concerns conditions that can enable – and even recent history is replete with examples – significant challenges to the principles of professional independence, impartiality and objectivity.

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<sup>20</sup> As identified by Article 338 of the Treaty on the Functioning of the European Union and Article 2 of the European statistical law (Regulation (EC) No 223/2009).

<sup>21</sup> In this context, careful scrutiny is also required of the demands on NSIs to become stewards of government administrative data or to have NSIs and ONAs subject to stewardship by other institutions.

**R3.** Relevant laws should specify that while the producers of European statistics may in some cases be part of policy institutions, their status should differ in fundamental ways from that of other parts of these institutions. They should provide that the relations between the rest of the policy institution and the statistics producer be based on respect of the professional independence of the latter with regard to all activities that affect the production and dissemination of statistics, including activities regarding internal management and budget execution relating to the statistics production process. Over the medium term, explicit consideration should be given to the optimal institutional setting for a given European statistics producer (Eurostat, NSI or ONA). Institutional dependence or administrative anchoring needs to be scrutinised and solutions reflected in laws and institutional settings.

**IMPARTIALITY OF STATISTICAL PRODUCERS: USERS' ACCESS TO STATISTICAL RELEASES**

The necessary impartiality of statistical producers in the access of users to statistical releases has to be addressed in the context of what has been discussed in some detail above regarding the need for both actual and perceived professional independence for European statistics, and the best practice provided in the CoP under the principle of impartiality and objectivity: 'All users have equal access to statistical releases at the same time'. The best practice in the CoP should be applied with no exceptions. This advice applies to NSIs, Eurostat [22] and ONAs equally.

<sup>22</sup> The issue of pre-release access provided by Eurostat was raised most recently in the 2021 and 2022 ESGAB annual reports.

On the contrary, pre-release access is still widely practiced in the ESS. Often, the decision on pre-release access may not be in the hands of European statistics producers, but of actors in the institutional environment that set the rules in this matter. If an official statistics producer is part of a policy institution, there may be administrative/hierarchical compulsion of statisticians to provide pre-release access to their political supervisors and others in the broader institution. Thus, ESGAB would recommend that abstention from pre-release access be explicitly and unambiguously provided for in the legal framework. Until this is achieved, there should be full transparency upfront in the affected statistical releases. It should be noted that the rule of no pre-release access should also be applied to, besides government officials, all other potential users, such as press/media outlets and research institutes.

**R4.** The best practice provided in the Code of Practice under the principle of impartiality and objectivity, namely 'All users have equal access to statistical releases at the same time', should be applied with no exceptions. This recommendation applies to NSIs, Eurostat and ONAs equally. Abstention from pre-release access should be explicitly and unambiguously provided for in law. Until this is achieved, there should be full transparency upfront in the affected statistical releases.

**2.1.3 CHALLENGES BY DISCRETIONARY ACTIONS FROM THE INSTITUTIONAL ENVIRONMENT**

The challenges to the implementation of the principle of professional independence are also evident in actual discretionary actions of some actors in the institutional environment

of European statistics producers, that have on certain occasions openly and publicly challenged the professional independence of official statisticians producing European statistics. There has been a good number of cases since the adoption of the CoP, up to very recently.

Cases include the outright firing of heads of statistical producers, or the creation of hostile conditions for heads and/or staff of statistical producers to do their work, leading to their departure from their posts or even their prosecution for insisting on following the principles of the CoP. The issues of professional independence that have become a flashpoint have included, for example, decisions on statistical methods, standards and procedures, on dissemination of statistical results, on the (re)organisation and work processes of statistical offices, on the process of provision of confidential data, and on commenting on criticism/abuse of validated statistical results. There may also be other acts of pressure on professional independence that never reached the wider public, but potentially still had damaging effects on professional independence.

In order to help prevent the occurrence of such discretionary actions, ESGAB considers it important to address the weaknesses in the existing legal frameworks and institutional setups as discussed above.

The various instances of challenges to the principle of professional independence could contribute to an environment where the likelihood of self-censorship by official statisticians increases. The demonstration effects of these challenges may affect the resolve of official statisticians to uphold and defend their professional independence or to remain in their positions. In addition, these demonstration effects may increase the likelihood that other actors in the institutional environment will repeat the challenge, either in the same or in another jurisdiction served by the ESS.

The instances of publicly known challenges to the principle of professional independence through discretionary actions of actors in the institutional environment also affect the perception of users and of the public in general about the trustworthiness of official statistics. Several such challenges have been covered in the media. These damage the 'brand' of European statistics as the go-to principles-based statistics in the new data ecosystem, and the trust in these statistics. These effects on trust cannot be assumed to be limited to the part of the ESS where a specific and known challenge to professional independence took place; there is contagion and the effects on trust can reach all parts of the ESS and disturb European statistics in general <sup>(23)</sup>.

To address discretionary actions from actors in the institutional environment that challenge the implementation of the CoP, ESGAB considers that measures such as the ones recommended below would be helpful.

## **MONITORING COMPLIANCE WITH THE CODE OF PRACTICE INSTITUTIONAL ENVIRONMENT PRINCIPLES**

ESGAB believes that independent national bodies that would monitor compliance with the principles of the CoP regarding the institutional environment for both NSIs and ONAs should be established in all Member States as an additional 'check and balance' that would strengthen the implementation of the CoP.

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<sup>23</sup> There is no recent clear evidence about trust in European statistics by the EU public. There were Eurobarometer surveys and reports in 2007, 2009 and 2015 regarding trust in official statistics, but no reports since. These older surveys show a lack of trust in official statistics among the public, with trust declining between 2007 and 2015. The part of the EU public that lacked trust in official statistics reached 50 % in 2015, with an additional 6 % not knowing whether to trust these statistics. Eurostat's more recent customer satisfaction surveys do not provide an adequate view of the EU public's trust in European statistics. Finally, peer reviews cannot answer the question of trust of the public in European statistics produced by a specific statistical producer or an NSS.

Recommendation 11 of the *ESGAB Annual Report 2022* noted that Regulation (EC) No 223/2009 should be amended to this effect. ESGAB here notes that national laws should also be amended accordingly. These bodies could be of help in identifying and promoting improvements in the legal and institutional framework (see above), along with providing some protection against discretionary actions that are incongruent with the principles of the CoP. Particular attention would need to be paid in the legal framework setting up of such bodies, to ensure that their members work solely in the interest of official statistics and are independent in fulfilling their function from political or other interests. The law should provide that the members of these bodies are selected in a transparent process and on the basis of proven exceptional expertise and national and/or international experience in matters relating to the CoP. The law would also specify that the bodies must operate at arm's-length from other bodies, including policy bodies and the statistical producers (NSIs, ONAs) they monitor for compliance with the CoP.

**R5.** Independent national bodies that monitor compliance with the Code of Practice regarding the institutional environment for NSIs and ONAs should be established by law in all Member States. Laws should provide that the members of these bodies are selected with a transparent selection process from among experts with exceptional skills and national and/or international experience in matters relating to the Code of Practice. They should specify that members of such bodies work solely in the interest of official statistics and must be independent from political or any other interests in fulfilling their function. It should be provided that these bodies operate at arm's-length from other bodies, including policy bodies, NSIs and ONAs.

**POLITICAL COMMITMENTS ON CONFIDENCE IN STATISTICS**

In addition, to help address challenges to the implementation of the CoP principles regarding the institutional environment, the political CCSs should be strengthened. The implementation of the CCSs has varied across the political authorities (Member States and the European Commission), which are actually the ones that need to undertake these CCSs (and not the producers of European statistics). As pointed out in the *ESGAB Annual Report 2022* (Recommendation 15), the current EU legal framework (Regulation (EC) No 223/2009) should be modified to strengthen the CCSs to be made by the policy side. In addition, the European Commission and Member States should review and recast their existing CCSs to more adequately support and further improve implementation of the CoP.

**R6.** The political Commitments on Confidence in Statistics (CCSs) should be strengthened. Regulation (EC) No 223/2009 should be modified to strengthen the rules of formulation of CCSs to be made by the policy side. The European Commission and Member States should review and recast their existing CCSs so as to more adequately support and further improve the implementation of the Code of Practice.

Discretionary actions from the institutional environment that challenge the implementation of the principles of independence, impartiality and objectivity can also be addressed by the implementation of the proposals made earlier in this section (see 2.1.2) regarding the legal framework and institutional setup for European statistics at the EU and national levels, and the further strengthened 'statistical culture' among both users and producers of European statistics that these enhancements would help bring about.

## 2.2 STATISTICAL SYSTEM DEVELOPMENT

### 2.2.1 INTRODUCTION

ESGAB is of the view that further development of the ESS is essential to guarantee compliance with all the principles of the CoP. Development of the ESS is necessary at both the level of National Statistical Systems (NSS) of Member States and at the supranational level of the ESS, encompassing Eurostat and its interaction with statistical authorities in Member States. As indicated in the CoP itself, 'Institutional and organisational factors have significant influence on the effectiveness and credibility of a statistical authority developing, producing, and disseminating European Statistics.'

### 2.2.2 ISSUES FOR NATIONAL STATISTICAL SYSTEMS

#### COORDINATION AND COOPERATION ISSUES IN NSS

Coordination and cooperation problems are common in almost all members of the ESS. The CoP and the EU statistical law (Regulation (EC) No 223/2009) more broadly attribute to National Statistical Institutes (NSIs) the coordination of all producers of European statistics within the NSS. In several Member States, national statistical legislation is relatively clear that the NSI is the coordinator of the NSS. However, such coordination and cooperation does not seem to be adequate and effective in many cases.

The problems are of many types and are shown below.

(i) In several Member States, legislation regarding coordination and cooperation within the NSS is inadequate, and procedures are not in place and/or are not implemented effectively for carrying

out the coordination role at the national level. There are therefore important weaknesses in the coordination powers of the NSI with respect to Other National Authorities (ONAs). As a result, NSIs often do not adequately coordinate the statistical activities of all ONAs that develop, produce and disseminate European statistics.

(ii) National guidelines to ensure quality in the development, production and dissemination of European statistics within the NSS are not always made available to ONAs by the heads of the NSIs. The implementation of such guidelines and the overall quality of European statistics produced by ONAs are not always adequately monitored and reviewed by the coordinating NSIs.

(iii) The national legal frameworks and institutional setups, to the extent that they relate specifically to ONAs as producers of European (official) statistics, are often not well- developed and in accordance with the CoP. ONAs are in many cases operating as (integral parts of) policy bodies and not as official statistics producers (see also Section 2.1 of this report). Their statistical production is often considered a marginal activity of staff normally involved in other, non-statistical activities.

(iv) The above characteristics of legal frameworks and institutional setups regarding ONAs can introduce difficulties in the sharing of data among ONAs and NSIs within an NSS. Issues of quality of upstream data and concerns about preserving statistical confidentiality can hamper the cooperation of statistical producers.

(v) National statistical work programmes for the entire set of European statistics producers in the NSS often need to be improved, and this can be done with better coordination and cooperation within

the system, supported by legislative and institutional changes. Improved programming, along with regular reporting on performance under such programmes, can improve accountability and the overall implementation of the CoP. There are clear examples where governments, through ONAs or other entities, sometimes produce statistics-like products that do not meet the quality requirements and general principles of the CoP. These statistics-like products should not be considered official statistics and cannot be included in national statistical programmes. At the same time, statistics clearly designated by the coordinating NSI as experimental can and should be included in the statistical programmes, noting the appropriate caveats. Statistical laws should include a clear definition of the scope and purpose of official statistics.

- (vi) Coordination and cooperation within NSS are also often hampered by inadequate human, technological and financial resources, both at the level of ONAs and NSIs. In some cases, there is a need to revisit the existing division of labour between NSIs and ONAs, as it may not be appropriate given the scarcity of resources that particularly some of the ONAs face.
- (vii) As a result of all the above, in various Member States and in the case of ONAs there are deficiencies in the implementation of the CoP vis à vis not only the principle of coordination and cooperation but also the principles of quality commitment (see also Section 2.5), professional independence, impartiality and objectivity (see also Section 2.1) and various others. This of course affects the overall adherence of the NSS to the CoP.

**R7.** To improve coordination and cooperation within the national statistical system, Member States should reinforce legislation on coordination and supervision by NSIs of all ONAs, on application of quality assurance in the whole NSS, on statistical work programmes for the entire NSS, and on the definition of the scope and purpose of official statistics. In addition, the division of labour among NSIs and ONAs and their respective institutional set-ups should be reviewed and optimised.

**R8.** Heads of NSIs should always make available to ONAs national guidelines to ensure quality in the development, production and dissemination of European statistics and should monitor their implementation and the quality of the statistics.

#### ISSUES IN NSS ACCESS TO DATA SOURCES AND DEVELOPMENT OF NSS

As a result of the technological evolution of official statistics production processes, statistical systems have had to evolve from systems focused mostly on surveys (with confidentiality rules adapted to them), to systems that must be a mixture of surveys, administrative records and privately held data. While these changes have meant a notable modernisation of official statistics, they also introduce problems in the coordination needs and confidentiality rules of European statistics. Some of the issues identified by ESGAB are shown below.

- (i) The statistical legislation in many Member States is not robust enough to guarantee NSIs the continuous and stable flow of administrative records necessary to produce European statistics. Furthermore,

in some cases NSIs do not even have the possibility to provide inputs into the design or configuration of administrative records that are also necessary for the production of European statistics.

- (ii) The unhampered provision of administrative data to ONAs to produce European statistics may be even more varied than is the case for NSIs. This again (see Section 2.1) raises issues about the legal framework for official statistics, the institutional setting of ONAs and the degree of implementation of the CoP in the case of ONAs.
- (iii) In the case of privately held data, there is a need for clarification in national legal frameworks to provide access to privately held data to the producers of European statistics, which would also be consistent with EU-wide data-protection norms.
- (iv) The increasing reliance on a mix of data sources may accentuate difficulties (mentioned above) in data sharing among European statistics producers, i.e. among NSI and ONAs, within the NSS. To address confidentiality and quality concerns, there is a need for further development of the statistical system along the lines indicated in part 2.2.2.

Relevant recommendations are presented under Section 2.3 on access to administrative and private data sources.

## EU AND NATIONAL STATISTICAL LAWS ON ACCESS TO DATA SOURCES

Recent changes in the EU legal framework, such as the emergence of the Data Act or the Data Governance Act, have assigned to official statistics a very residual role in the European data ecosystem. In parallel with these changes at the EU level, national data ecosystems are

also developing across all Member States, albeit in a heterogeneous manner. As a data-driven organisation, the NSI is an integral part of the national data ecosystem and is dependent on its further developments, particularly those relating to the new data sources. Furthermore, although access, use and integration of administrative records is guaranteed to NSIs by the European statistical law<sup>[24]</sup> and often by national statistical regulations, it is necessary to ensure that these rights, along with the rights of access to the new private data sources, are effectively adapted and applied to the new data ecosystem without delays.

**R9.** With the new developments in the data ecosystem, inconsistencies may arise between the EU and the national legal frameworks affecting the Code of Practice principle on 'Mandate for data collection and access to data'. These would need to be identified early and pre-emptively addressed.

## ISSUES OF DATA STEWARDSHIP IN NSS

The roles of the NSIs in the evolving data ecosystem are being rethought by policymakers. One area that presents some challenges is the demands on NSIs to become stewards of government administrative data in line with what is described in Article 7 (Competent bodies) and Article 8 (Single information points)

<sup>24</sup> See Articles 17a.1 and 17a.2 of Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities (OJ L 87, 31.3.2009, pp. 164–173, ELI: <http://data.europa.eu/eli/reg/2009/223/oj>).

of the Data Governance Act <sup>(25)</sup>. In some national legislations, the NSI already appears as the data steward of the national data ecosystem, whereas in other countries this task is assigned to other institutions. One way or another, challenges can emerge regarding professional independence, impartiality and objectivity, adequacy of resources and statistical confidentiality, to mention only a few. All the aforementioned risks could jeopardise some of the progress achieved in recent times in the implementation of the CoP.

**R10.** Before data stewardship functions are established and roles are assigned, national authorities must carry out a thorough analysis of the proper conditions for, and the implications of, such a change. If the decision is made to proceed, the legislative framework and the institutional settings must be strengthened appropriately to buttress the implementation of the principles of official statistics that may face risks, such as professional independence, impartiality and objectivity, adequacy of resources, commitment to quality and statistical confidentiality. New systems that are being contemplated should, *inter alia*, be assessed on whether they would ensure clear separation between statistical and administrative activities, both in substance and in the eyes of the public.

## CONFIDENTIALITY ISSUES IN NSS

Confidentiality, already mentioned with respect to some issues above, is an important concern among citizens in the EU. Although the importance of preserving statistical confidentiality, in compliance with the CoP, is well understood and noted in statistical legislation, some concerns have been raised about the following issues:

- (i) ensuring that possible statistical confidentiality incidents are specifically identified;
- (ii) as soon as the data enters the statistical production environment, personal identifiers might create possible breaches of confidentiality;
- (iii) in some statistical systems, access to microdata is allowed for reasons other than scientific ones;
- (iv) the use of privately held data for production of official statistics can lead to various situations that might affect statistical confidentiality <sup>(26)</sup>.

**R11.** There must be a clear analysis of risks to statistical confidentiality that may arise from existing or new aspects of the production and dissemination of European statistics in a national statistical system and actions taken to safeguard confidentiality.

<sup>25</sup> (Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act), OJ L 152, 3.6.2022, pp. 1–44, ELI: <http://data.europa.eu/eli/reg/2022/868/oj>.

<sup>26</sup> Some public debates have arisen in some EU countries regarding respect for confidentiality in the use of private data.



### 2.2.3 ISSUES FOR THE ESS AS A WHOLE

In its 2022 annual report, ESGAB presented views on areas where there is a need to develop the statistical system further at the level of the ESS to promote the implementation of CoP principles on coordination and cooperation, mandate for data collection and access to data, and commitment to quality. These views were provided in the context of ESGAB recommendations for amendments to the statistical law of the EU, Regulation (EC) No 223/2009. ESGAB believes that these recommendations and their rationale continue to be valid today. Indeed, their implementation at the supranational level of the ESS (encompassing Eurostat and its interaction with statistical authorities in Member States) would produce institutional and organisational developments that are necessary for ensuring compliance with the principles of the CoP in the ESS. The implementation of these recommendations supplement actions that also need to be taken at the national level (see above).

Below is a brief mention of some of the main recommendations for changes in the EU legislative framework pertaining to the specific CoP principles mentioned above <sup>(27)</sup>. It should be noted that the ongoing proposal for amending Regulation (EC) No 223/2009 from the Commission and the reaction to this proposal from the co-legislators include provisions regarding access to private data and data sharing within the ESS. These provisions, which are in the direction of the recommendations of the *ESGAB Annual Report 2022*, should be further improved in accordance with the specific recommendations therein.

- (i) The regulation should provide in its articles a strong legal mandate for Eurostat to receive access to privately held data strictly for the purpose of producing or validating European statistics. The regulation should provide that if NSIs or other European statistics producers are involved in the processing of privately held data accessed by Eurostat, including for the purpose of producing European statistics for their corresponding Member States, Eurostat would have to set up special processes and protocols in an EU space, under its responsibility to preclude any possible misuses of the data.
- (ii) The regulation should be amended to provide for a new framework of sharing the data of individual statistical units within the ESS that would involve Eurostat setting up special processes and protocols in an EU space under Eurostat's responsibility to access the data to be shared and, when necessary, invite other European statistical authorities to participate in the data processing.
- (iii) The regulation should be strengthened regarding the quality of national data transmitted to Eurostat by Member States. When assessing the quality of the data transmitted, Eurostat should make publicly and promptly available any serious concerns it has, and disclose any breaches of the CoP.
- (iv) The regulation should reinforce the coordination functions of Eurostat. Eurostat should coordinate statistical activities of all EU bodies and directorates-general that contribute data that are used for the development and production of European statistics, inter alia with a view to ensuring consistency and data quality and minimising reporting burden.

<sup>27</sup> The reader should refer to the 2022 annual report for a detailed discussion of the recommendations and their rationale. Other ESGAB recommendations from the report, pertaining more directly to other principles of the CoP (such as professional independence) are noted in other sections of the present annual report.

**R12.** To decisively advance coordination and development at the level of the ESS, Regulation (EC) No 223/2009 should be amended regarding access to private data and data sharing within the ESS. The proposal from the Commission and the reactions to this proposal from the co-legislators, which are in the direction of the recommendations of the ESGAB Annual Report 2022, should be further improved in accordance with the specific recommendations therein regarding (i) Eurostat's leading role, with accountability, in accessing privately held data and in involving NSIs in its processing; and (ii) Eurostat's leading role in setting up a new system of sharing the data of individual statistical units within the ESS with Eurostat itself as an accountable hub of sharing data among ESS statistical producers in an EU space. With a view to improving ESS coordination and development, the regulation should also be amended by providing for (i) Eurostat publicly and promptly making available any serious concerns for Member States' European statistics quality and disclosing any breaches of the European Statistics Code of Practice; and (ii) reinforcement of the coordination functions of Eurostat.

## 2.3 ACCESS TO ADMINISTRATIVE AND PRIVATELY HELD DATA SOURCES

### 2.3.1 INTRODUCTION

The access of the ESS to administrative and privately held data sources is an increasingly important issue and has been a recurring topic in ESGAB's deliberations and publications over the recent years. The peer reviews indicate that to date, the prerequisites for such an access, and its implementation in the actual production process, are very heterogeneous across Member States. While some countries have long been using administrative data to generate highly relevant statistics (e.g. population censuses, data on income inequality), in others there are still large pools of unused administrative data, mainly due to the lack of a clear legal mandate but also often due to other implementation hurdles. Access to relevant administrative data can reduce the reporting burden and help offset respondents' increased reluctance to answer surveys. Similarly, while a number of countries have set up (ad hoc) cooperation agreements with holders of privately held data to access their data for the production of essential statistics (e.g. inflation, environmental figures), others are moving much more slowly in this direction for various reasons, one of which is the absence of explicit legal arrangements and protocols that address the specific challenges posed by this type of data.

From ESGAB's point of view, it is essential that NSIs formulate a vision, taking account of their national backgrounds and the European perspective, on why access to administrative and privately held data is necessary, which results shall be achieved and how society at large will benefit. The next step is to actively convince society and legislators of what may be called 'social licensing': NSIs are commissioned by society to produce relevant high-quality statistics

also from privately held data. Enshrining confidentiality even better than before in laws and regulations and actively communicating on confidentiality concepts and protection methods would be very important in this context.

But even a far-reaching legal mandate can only be a starting point. In fact, while such a mandate has already been established in some countries, the use of administrative and especially privately held data sources appears to be still limited or in the development process (e.g. as experimental statistics). Therefore, ESGAB recommends that the ESS take stock and work out best practices to integrate the new data sources regularly into European statistics. An important point in this regard are clear and long-term cooperation agreements, both with public and private data holders. In addition, the ESS should take a clear European perspective. This is especially important whenever official statistics is concerned with cross-national phenomena, which is when a leading role of Eurostat is particularly relevant (see Recommendation 12). For example, accessing the datasets of large multinational enterprises at the EU level, i.e. by Eurostat, can be more efficient than organising it nationally.

To build trust that NSIs will handle the data carefully and responsibly, data-protection issues need to be addressed both in the legal context and in terms of cooperation agreements. This will be particularly challenging whenever records need to be linked, because this entails, at least to some extent, the sharing of personal identifiers. ESGAB is fully aware of these challenges but also emphasises the usefulness of record linkage for the production of relevant high-quality statistics and as a basis for scientific policy analysis. A viable approach could be for the legislator to require compliance with strict rules and protocols that guarantee data protection and to allow NSIs and Eurostat the processing of personal identifiers for record linkage only for precisely defined and well-

documented purposes, such as for research projects approved by a scientific advisory board or for the production of small-area statistics relevant for policy decisions.

It is also necessary to address the resource issues. Almost all peer reviews discuss the challenges arising due to the 'data turn' in official statistics. The human skills and technical resources needed differ from what was required previously, hence the transformation will be costly. For example, highly skilled IT and big data specialists are scarce on the labour market and in-house training will require freeing up resources in the first place. In addition, NSIs may need to cover the marginal expenses accruing on the side of the private data holders or even provide monetary incentives, which so far typically has not been foreseen in their budgets.

In addition, NSIs alone will not be able to follow the extremely fast pace of technical and scientific progress in this field. Hence, they will need to invest more into cooperation with external partners, particularly with academia. Close cooperation with academia will not only be key to get hold of the appropriate know-how but also to motivate graduates for jobs in official statistics. It was, inter alia, for this reason that ESGAB recommended in its 2022 annual report that Eurostat should be mandated to set up and host a European Research Institute for Official Statistics (ERIOS).

### **2.3.2 ACCESS TO ADMINISTRATIVE DATA SOURCES**

While many NSIs access administrative data sources such as registers on a regular basis, the peer reviews revealed that not all NSIs are involved in the design, development and discontinuation of administrative records as foreseen by Principle 2, Indicator 2.2 of the CoP. Such involvement is key to make these records more suitable for statistical purposes.

Thereby, the structure of the data, its coherence and continuity and thus the data quality can be monitored by NSIs and possibly be improved to enhance quality and thus trust in European statistics. Principle 2, Indicator 2.2 of the CoP must be fully implemented in all Member States and at the EU level.

Observing that legal obstacles still appear to exist, ESGAB recommends that the access to administrative data sources be enshrined in national law as a right of official statistics producers whenever a justified need exists. Importantly, the seniority of this legal provision above others needs to be secured.

**R13.** ESGAB recommends that sustained and long-term access of NSIs to administrative data sources be enshrined unambiguously in national law and that the seniority of this legal provision above others be secured. In the case of ONAs, such access to administrative data sources should be granted if they adhere to the stipulations of the Code of Practice as they apply to the NSIs.

### 2.3.3 ACCESS TO PRIVATELY HELD DATA SOURCES

Privately held data have become an increasingly rich reservoir of information about social, economic and environmental developments. At the same time, access by NSIs or Eurostat to privately held data sources induces important challenges, as these data often are not only highly sensitive – they may be considered business secrets and are typically highly confidential – but also at the core of the business models of many firms. Therefore, ESGAB emphasises the relevance of building up trust that official statistics are very transparent about their data needs

and how they use the data. The *ESGAB Annual Report 2022* recommended that NSIs and Eurostat be provided with a legal mandate for the access and use of privately held data, as this would be a proper and legitimate vehicle for accessing this type of data sustainably and on a mass scale. It also emphasised that it is of prime importance that the private data are used only for statistical purposes, including research, and do not end up in any way or form in the hands of market competitors or governmental or non-governmental entities. The producers of European statistics should be mandated by law to create special and explicit arrangements and protocols to guarantee this commitment.

Private data are often considered to be business secrets, and even important for the national interest. Taking this into account, data use solely for statistical purposes, including research, and data protection are absolutely fundamental principles that have to be observed. Earning the trust of private data owners, based on which they may provide access to their data, would depend on accountability and transparency. Consequently, there is a need for transparency of the procedures, protocols and accountability set-ups in place. Full transparency of this institutional set-up would be key to rendering accountability effective, which in turn would help develop the trust of private data owners, who could otherwise be reticent about their data being shared with others.

**R14.** ESGAB recommends that NSIs and Eurostat be provided with a legal mandate for the access and use of privately held data for statistical purposes. Such access should be based on clear long-term cooperation agreements. To ensure data protection, NSIs and Eurostat should set up appropriate and transparent arrangements and protocols.

### 2.3.4 RECORD LINKAGE AND COOPERATION WITH RESEARCH

When official statistics are granted access to administrative or privately held data, they should be provided with identifiable microdata, thereby allowing linking and integration of different data sources. Such a linking is important to produce relevant statistics, such as small-area statistics. It is also necessary to enable researchers to conduct insightful projects. To this end, close cooperation between the members of the ESS and academia is key. Therefore, ESGAB reiterates its recommendation published in the 2022 annual report that such cooperation should be funded appropriately, especially at the EU level.

**R15.** ESGAB recommends that the legislator grant NSIs and Eurostat the right to process personal identifiers, in order to allow record linkage for precisely defined and well-documented statistical purposes. In such cases, compliance with strict rules and protocols that guarantee data-protection needs to be ensured.

**R16.** ESGAB recommends that the members of the ESS be mandated and endowed with appropriate funds to closely cooperate with the research community. In particular, Eurostat should be mandated to set up and host a European Research Institute for Official Statistics (ERIOS).

## 2.4 RESOURCE AVAILABILITY AND MANAGEMENT

### 2.4.1 INTRODUCTION

The CoP attaches equal importance to both the adequacy of resources (Principle 3) and their effective and efficient use (Principles 10 and 11). Over the years, efficiency of the statistical system has increased due to the development of computation technologies. Nevertheless, the need for high-quality statistics and all that this entails, along with often tight fiscal situations for governments, have meant that the producers of official statistics have continuously faced a damaging shortage of financial, human and technical resources.

Various sources of information still point to the existence of this problem, which strains the capacity of statistical authorities. On the one hand, the development of new statistics, setting up modern data platforms, customisation of statistical products and improved timeliness require more resources. On the other hand, quality in existing areas of European statistics should be maintained and improved.

The problem has become even more serious in light of the rapid evolution of the data ecosystem in recent years. Producers of official statistics are facing increasing competition, both from private producers of statistics-like information and also from government/public agencies in the areas traditionally reserved for NSIs. These competitors usually offer greater timeliness, new and flexible data products and modern accessibility to data, but by-and-large do not meet the quality criteria outlined in the CoP. However, this does not seem to matter to many users – including government users – at least in the short-term.

Consequently, European statistics producers are faced with a choice of either 'cutting

corners’ on quality and ‘reprioritising’ or markedly improving their performance in areas which are of the highest importance for users. Sincere commitment to and compliance with the principles of the CoP should be maintained to further build the brand of principles-based statistics.

Thus, the provision of truly adequate financial, human and technical resources has become even more important in recent years, while such resources have become even more difficult to acquire given increasing competition.

#### 2.4.2 PROBLEMS ABOUT RESOURCE AVAILABILITY AND MANAGEMENT

Broadly speaking, resource-related problems are of both a quantitative and a qualitative nature. The former refers to the size of staff, level of salaries and adequacy of budgets, whilst the latter relates mainly to staff skills, effective investments allowing statistical offices to increase efficiency of business processes and quality of services.

#### QUANTITATIVE ASPECTS

The ability to attract and retain staff in governmental statistical organisations is still problematic in a number of Member States and also at Eurostat. High levels of staff fluctuation and difficulties in hiring staff can be observed in several national statistical authorities. This applies to both NSIs and ONAs. There are examples of reduced budgets in the ESS, which puts meeting existing and new legal obligations at risk.

In some cases, statistical agencies are bound by recruitment restrictions even if the budget would allow hiring of new employees. Such situations are not uncommon when the number of positions in the general government sector is limited or reduced for policy/political reasons.

However, it must be taken into account that the situation of different institutions varies. In the current digital transformation, the staff developing government data / statistical systems should not be restricted to the same extent as others.

The current environment in which statistical authorities work makes the picture even more worrying: the statistical system has high ambitions of responding to changing expectations and emerging opportunities of the new data ecosystem, whilst available resources and capabilities do not correspond to these ambitions.

**R17.** The statistical authorities of the ESS should treat retaining, attracting and developing professional staff as a strategic priority.

**R18.** The responsible budgetary authorities should back up production and innovation of European statistics with appropriate funding of operating costs and investments (IT investments in particular) to meet existing legal obligations and new data demands.

#### QUALITATIVE ASPECTS

Statistical authorities often claim that the skills necessary to adapt to the evolving data ecosystem are not sufficient. In fact, statistical institutions have long had to cope with pressure and challenges, such as substituting surveys by secondary data and facing ever-changing requests for new statistics by users. In parallel, the need to keep up with developments in computing technologies have been on the agenda throughout recent decades. Yet, the current exponentially growing volume of data and information is unprecedented and players operating in this world are currently going through a very dynamic development. The risk of lagging behind currently seems to be

higher than ever before for official statistics. Concerned about these trends, ESGAB made in its 2022 annual report – and repeats in this year’s report (see Recommendation 16 above) – a recommendation on the establishment of an ERIOS, focusing on research and development of official statistics and data science.

Along with upskilling, several NSIs need to modernise their human resources policies to reinforce the attraction of people with the relevant skills, and conduct systematic staff appraisals and rotations within the organisation. Newly recruited workers too often claim that career outlook in a statistical organisation is not too promising. Some NSIs face the problem of ageing staff. Consequently, the human resources strategies should address both: training of existing staff and recruitment of staff with the necessary skills. Considering that statistical authorities have in many instances historically been organised in a form of thematic silos, the internal transfer of people from one unit to another has been inhibited to some extent. Such heritage hinders the movement of skills and experience within and between organisations. Additionally, necessary skills are more difficult to obtain and to retain in ONAs, which are often parts of non-statistical organisations. Exchange of people between statistical organisations may mitigate this problem and should be encouraged.

As described in the section on statistical systems development (Section 2.2), completely new roles, such as stewards of the national administrative data systems, have been given to the NSIs in some Member States in recent years. There are several aspects that need to be carefully observed and assessed with regard to these developments, since the boundaries of administrative and statistical activities and resources could very easily blur. It is clear that the role of government data steward, depending on its specific setup, requires additional human and financial resources with adequate knowledge, skills and technical means.

Another problem relates to cooperation between academic institutions and statistical authorities. University programmes do not include official statistics or do so only to a very limited extent <sup>[28]</sup>. Rapid developments in the data world and the statistics world probably give good reason for reflecting on traditional statistics curricula and integrating them with data science. For instance, the exploration and study of quality frameworks and principles of official statistics (e.g. the CoP) could also be included within these curricula.

**R19.** The statistical authorities of the ESS should update skills and expertise of staff in data management / data science to be able to take up new data sources, develop and implement new methodologies and techniques of data collection, processing and dissemination. Synergies between statistical and academic institutions should be sought in this context.

Some statistical authorities claim that their IT systems are outdated. In general, investments in IT and the areas of methodology and statistical procedures seem to be insufficient in the ESS. The CoP Principle 10 (Cost effectiveness) requires investing in IT whilst leveraging IT solutions in as many statistical domains as possible, using secondary data sources where feasible and standardising processes. Apart from that, there should be systematic monitoring of the use of resources in order to achieve efficiency gains and to free resources for new activities. All these elements are highly relevant at the current stage of development in the ESS.

During the last decade, in some countries state IT services have been centralised.

<sup>28</sup> The European Master’s in Official Statistics programme tries to address this deficiency. At present, 34 such programmes have already been accredited by the European Statistical System Committee in 18 European countries, but their reach remains fairly limited for the time being.

For an NSI this may constitute outsourcing both hardware and software services to a governmental agency. There are benefits and risks related to this approach. Gains from economies of scale and access to increasingly important cyber security services are certainly potential benefits. Yet, several principles of official statistics are put under risk in this way: (i) responsibility for confidentiality becomes blurred; (ii) an administrative institution may be provided with an opportunity for intervention into the statistical production processes; and (iii) service-level agreements may be imposed on the NSI by a higher administrative authority.

As already previously done, the application of common IT solutions should continuously be explored, also at the ESS level. This is inevitable, for example, in a situation where the ESS increases data sharing or centralises other statistical processes.

IT is not the only enabler of efficiency. Several NSIs implement principles of lean management and hope to free up resources in this way for new tasks, at least in part. There are still quite extensive networks of regional offices in some Member States, which usually perform data collection from businesses and preliminary data checking or organise the work of household surveys. Relying on an assumption that data processing becomes more centralised, further possibilities for efficiency gains through phasing out decentralised data processing should be evaluated.

**R20.** To further increase the efficiency of and innovate the production of statistics, the statistical authorities of the ESS should revise their IT strategies where appropriate. The authorities should keep the IT systems updated for the existing business, continue standardisation of statistical processes and further develop and leverage existing IT solutions into several statistical domains to the extent possible. Common ESS-wide IT solutions should be continuously explored and launched where feasible. Statistical authorities should continuously explore and deploy organisational, methodological and technical measures to improve efficiency of data collection and data processing and to free up resources for new activities.

**R21.** In case of outsourcing and centralisation of IT services, the statistical authorities should identify and manage corresponding risks. They should maintain necessary decision-making powers in developing and running statistical IT systems.



## 2.5 QUALITY ASSURANCE OF STATISTICAL PROCESSES AND OUTPUTS

### 2.5.1 INTRODUCTION

As already emphasised above, in the current situation where the number of data producers in the data ecosystem is increasing and diversifying, the consistently high degree of implementation of the principles in the CoP relating to quality assurance of statistical processes and outputs are of distinguishing value for users. These principles form the core of the 'brand' of European statistics. Quality assurance systems established and implemented in the ESS as a whole and in each NSS aim at providing the basis for a lasting quality of statistical processes and outputs. This has to not only be preserved and further improved upon, but it also must be highlighted and advertised to data users, who often do not delve into the source of data and on whether these data can be trusted.

The ESS and national statistical authorities have developed their quality systems (concepts, policies, guidelines, procedures for application) over long periods of time. During the last 10–15 years, partly due to the design of the CoP, the European statistical quality approach has been divided between processes and outputs of statistics. Data processes had to be determined, defined, described and documented in order to manage quality. Institutions and procedures to monitor and improve the quality of these processes have subsequently been implemented. The Generic Statistical Business Process Model (GSBPM) has been adopted almost a decade ago and the Quality Assurance Framework of the ESS was put in place 12 years ago (updated in 2019).

However, in terms of such institutions and procedures, NSIs are at different stages of development. This disparity of development is

even greater within NSSs, with the ONAs often lagging behind the NSIs to varying degrees regarding institutions and processes. There is a need for improvement towards harmonising at a high level the implementation of quality assurance principles throughout the ESS (i.e. between Member States' NSSs), which also implies such strengthening and harmonisation within NSSs. The disparity of development also appears in relation to quality management teams. Indeed, they exhibit different tasks and levels of involvement across the ESS. It would be desirable that these teams participate in all relevant processes and discussions in a statistical producer to facilitate an effective exchange of knowledge among thematic experts, and between thematic experts and horizontal services within the producer (e.g. IT, communication and dissemination, administration). Furthermore, the use of common work platforms is advisable to ensure that staff are aware of developments across the ESS, the NSI and in the ONAs.

This implies that various assessments and recommendations made in this section pertain also to the section on statistical system development above (Section 2.2).

### 2.5.2 PROBLEMS WITH QUALITY ASSURANCE OF PROCESSES AND OUTPUTS

#### IMPLEMENTATION OF QUALITY SYSTEMS IN NATIONAL STATISTICAL SYSTEMS

Even though quality systems are present in NSS, it appears quite often that they are implemented only in NSIs; in other words, their effect does not reach ONAs. In these cases, quality policy is often not designed and applicable for – and thus is not harmonised – in the whole NSS.

Even worse, the national quality guidelines are not updated, which indicates that the national approach to quality assurance does not work

properly and is far from being proactive. There is often the need to undertake a systematic mapping of existing elements and to design, agree, document, publish and implement the quality approach more widely than just in the central statistical body (i.e. the NSI). As coordinators of production of European statistics at the national level, NSIs should at least monitor closely whether an ONA meets the quality criteria established in the statistical system. In addition, in some members of the ESS, the NSI is entitled to and performs certification of entities aiming to produce European statistics, which could be a model to explore across the ESS.

### **IMPLEMENTATION OF QUALITY REVIEW SYSTEMS**

Quality review systems are often in place, but coverage of statistical domains and regularity can be improved. For example, some NSIs deliver annual quality assessments of statistics and deeper assessments when changes in statistics are made or problems emerge. However, this does not ensure that all statistics are regularly covered by in-depth reviews. Missing centralised monitoring (both at the middle- and top-management levels) of quality measures can also be observed. This concerns both statistical outputs and processes. The reason behind the deficiencies in implementing quality management measures often lies in a lack of resources to conduct regular quality reviews, be it by internal or external experts.

ESGAB has noted problems of not meeting deadlines for submitting data to Eurostat from NSIs. Delayed submission of data puts timely release of data under risk at the EU level, forces Eurostat to use imputation/estimations and may reduce the coverage of data to be published country-by-country. ESGAB was also told that high-frequency data are not always updated in Eurostat public databases.

### **QUALITY AND USABILITY OF ADMINISTRATIVE DATA**

Quality and usability of administrative data sources has been a matter of concern of producers of official statistics for decades. To effectively make use of administrative data in official statistics, the producers should be involved in the design and changes of administrative datasets. As described in the section on access to administrative and privately held data above (Section 2.3), new data sources, including private ones, are being explored and used to produce experimental or official statistics. Such developments require the revision and updating of existing quality guidelines. Adequate resources should be foreseen for analysis and understanding of the quality of administrative data and other new data sources (such as privately held data). Most NSIs have undertaken substantial analytical activity under the label of experimental statistics. In terms of quality, the results of these and other analytical efforts need to be spread throughout the institution and beyond to inspire further experiments.

### **QUALITY AND NEW ROLES OF NSIS**

As a rather recent development and as described in the chapter on statistical system development above (Section 2.2), in some countries the NSIs are given new roles that go beyond the traditional boundaries of official statistics. In these instances, an NSI becomes a central data governance entity of the government, which potentially increases the NSI's role and burden in the context of quality management. It is certain that increasing quality and usability of administrative data improves quality of official statistics (timeliness, level of detail, lower burden on respondents). However, and as already stated above, the boundaries of administrative and statistical

tasks in the context of quality management should be made very clear in many aspects (confidentiality, methodology, quality assurance, use of resources, dissemination of data, etc.). Specific and possibly additional capabilities and resources would be needed for this.

**R22.** European statistics producers should follow the quality requirements consistently and keep quality guidelines updated, especially when making use of new data sources (administrative and private ones). They should systematically carry out quality reviews of both statistical processes and outputs. In case of limited capacities, prioritisation of statistical domains should be undertaken.

## STANDARDISING METADATA CONCERNING QUALITY

The ESS has implemented several ESS-wide horizontal standards over the last two decades. As one example, the Single Integrated Metadata Structure has been in place for a long time. Yet, metadata concerning quality (i.e. standardised reports on quality) are in some cases not based on this European standard. This is the case in some NSIs but constitutes a wider problem in ONAs. In some cases, quality reports required by European sectoral statistical laws are submitted to Eurostat but are not made available to users. Moreover, it cannot be assumed that all users become easily acquainted with public metadata that contains information on quality. Experienced users are more likely familiar with metadata, including the information on quality of statistical processes and outputs. Ordinary users, however, need easy-to-understand information on data quality. Whilst recognising the difficulty of addressing different demands, ESGAB believes that there continues to be a need for further support and proactive actions to ease access

and promote availability of metadata, including information on data quality tailored to the needs of different types of users. Various measures may be taken to this end – making sure that ordinary user support in a statistical authority covers quality information and assistance on how to use metadata, organising seminars for more experienced users, providing access to quality information at the point of access of statistical products and so on.

**R23.** Statistical authorities should produce user-oriented quality reports and producer-oriented quality reports that are easily accessible, preferably based on ESS-wide metadata standards. Access to metadata and quality information therein should be promoted in statistical products. Quality reports submitted to Eurostat should be made public at the national and global levels. Quality measures and content of metadata should be proactively explained to users.

## QUALITY OF STATISTICAL OUTPUTS

Quality of statistical outputs is multifaceted. The relevant aspects are defined in the CoP under Principles 11–15. It must be underlined that ESGAB received positive assessments from experienced users regarding output quality aspects of European statistics. Such users say that published data are relevant and largely perceived as reliable and accurate.

Yet, Principle 13 on timeliness and punctuality deserves serious attention. There are very good examples of improved timeliness (e.g. flash estimates of price statistics or quarterly macroeconomic statistics) without any visible problems of biased and/or extensive revisions at the EU aggregates level. However, ESGAB was told about timeliness problems relating

to household data and structural business statistics; in some statistical domains, data are released only 18–24 months after the reference period.

Several statistics, including very sensitive ones, undergo revisions, which is normal statistical practice. It is understandable that certain data need to be revised later because of the improved timeliness of the first estimates. Unfortunately, later data changes are often seen as quality issues. It seems to be the case that there is still room for systematic monitoring, analysing and publicly explaining the reasons for and the results of revisions and ensuring continuity of time series.

Another relevant aspect of quality of statistical outputs is defined under Principle 14 on coherence and comparability. Although most parts of NSIs have quality systems that measure the production process, it is more difficult to find internal teams within statistical authorities that are devoted to checking coherence of the output data. Experienced users of statistics, however, quite often notice any deficiencies in the coherence of published data, which is why regular and systematic dialogues with such users would help to detect and pave the way for solving these problems and to better explain revisions of published data.

**R24.** Building on their positive experience of early estimates, European statistics producers should explore further similar opportunities to improve timeliness of European statistics. They should pursue systematic and regular dialogue among internal units, as well as with experienced users of statistics, to identify any problems in data coherence and consistency. The reasons for and results of revisions should be clearly explained to users.

## 2.6 USER ORIENTATION AND RESPONSIVENESS: RELEVANCE, TIMELINESS AND ACCESSIBILITY

### 2.6.1 INTRODUCTION

Continuously and effectively meeting the information needs of society is a key task of European statistics producers (NSIs, ONAs and Eurostat). This requires statistics producers to engage with users to ensure that the quantitative facts for the relevant questions from society are provided. Considering their central importance, user orientation and responsiveness play a prominent role in the CoP, and the concrete requirements are summarised in several principles.

User orientation and responsiveness of official statistics cannot be evaluated in a static way. As society and the economy evolve rapidly, user needs change, new user needs emerge and new phenomena appear that need to be measured correctly. In addition, new technologies increase the speed of societal interactions and, at the same time, the importance placed on the timeliness of relevant information. This brings on a double challenge for official statistics, NSIs, ONAs and Eurostat: new topics to be covered and greater speed of data delivery to be achieved.

In this new data ecosystem, the tried and tested principles of the CoP continue to be of the utmost relevance, although their meaning in several areas may need to evolve.

While improvements are necessary in a number of Member States to fulfil the current requirements on user orientation and responsiveness of the CoP, the new and emerging challenges demand even further improvements to satisfy the newly emerging legitimate user requirements.

Overall, the needed improvements in user orientation and responsiveness cover several dimensions: consultation mechanisms with users; access to statistical products and to documentation of their quality, including access to microdata; dissemination, communication and receiving feedback regarding statistical products; statistical literacy; and appropriate reactions in case of criticism and misuse of statistics.

### **2.6.2 BUILDING UP INSTITUTIONALISED INTERACTIONS WITH USERS**

It is fair to say that NSIs, ONAs and Eurostat have only limited knowledge of the majority of the users of official statistics, as the range of these users is potentially very large. They typically include citizens, civil servants in relevant ministries, policymakers, academic researchers, data scientists, business organisations, civil society and the media. As official statistics are increasingly seen as a global public good, these user groups are both domestic and international. There is a lot of heterogeneity among these broad groupings. Their distinct requirements and evolving needs, along with their very different approaches to searching for relevant information, call for a more customised approach towards users. Having good knowledge of the different user groups and their relevant characteristics is essential to provide them with the quality information they need, especially in a context where there is increased competition from many different private data providers and declining trust in public institutions.

Institutionalised outreach to users and permanent user consultation mechanisms can increase the knowledge of statistical producers about the variety of users of official statistics, thus ensuring that the priorities in statistical production reflect society's information needs, and that statistical outputs are relevant, timely and effectively accessed. The consultation of users with very diverse backgrounds in institutionalised

arrangements aim at giving a mandate and 'licence' to official statistics producers regarding which statistics should be produced. This way they can work for the good of society as a whole and not only for specific user constituencies.

Many NSIs have set up permanent user committees or regular consultation mechanisms, but their role, number, size and composition vary widely across Member States. In some countries, there is a single formal body with representatives from many types of users (e.g. members of parliament, territorial authorities, trade unions, researchers, NGOs, invited experts). In others, there may be several bodies, each representing particular constituencies or stakeholder groups. The roles played by these bodies may vary from direct involvement in the identification of new and emerging areas that deserve investment from the part of official statistics producers to address information gaps, to simple advice on new projects proposed by the NSIs. ESGAB considers that there should be more systematic and institutionalised processes for consultation with users of very diverse backgrounds in the preparation of the statistical work programme and priority setting exercises, both on the national and EU levels.

In addition, very few countries have mechanisms to interact regularly with users in different stages of the statistical cycle (from needs assessments to programme planning and to evaluation of data dissemination).

Based on more systematic discussions with users, NSIs should also invest more in the development, production and dissemination of experimental statistics and new products that satisfy users' evolving information needs. Setting up this type of broader consultative mechanisms would help enhance the relevance of official statistics and clearly differentiate official statistics from private data providers, thus enhancing the branding of and trust in official statistics.

**R25.** ESGAB recommends that in all Member States and at the EU level, institutionalised, permanent user consultation bodies and processes be established and actively used, thus helping to identify the most up-to-date needs for statistical information (including the best means for its dissemination) of a very large and diverse community of users.

### 2.6.3 PROVIDING APPROPRIATE ACCESS TO DATA AND STATISTICS

Creating easy access to official statistical products and clear documentation are other important ways to engage with users. This has to be prepared by the statistics producers themselves. While NSIs, Eurostat and other official statistics producers in the ESS have made progress in recent years, they need to pursue and sometimes increase their efforts so that statistics are easy to find, in different formats, along with clear, standardised metadata and documentation regarding their quality and their limitations. The latest peer reviews show, for several countries, a need for differentiated guidance to various user profiles on the wealth of information available in official statistics and on the possibilities of reusing the data more easily. There should also be further improvements in the statistical producers' websites to standardise the information on metadata, methodology, revisions and quality, with regularly published reports. The navigation functionalities should also be improved and the possibilities for users to find and access official statistics through all modern channels of communication – like mobile phones – should be strengthened. Open data strategies should also be developed where they are still missing.

As already mentioned in previous ESGAB annual reports, more needs to be done in many countries to expand and facilitate the access

to disaggregated data and even microdata for researchers, such as through secure remote data centres, or by reviewing existing arrangements and reducing the related burden of accessing data. Relevant research requires often high granularity of the data, a need that should be satisfied by the producers of official statistics observing the principle of statistical confidentiality of the CoP. In this context, there is a need to periodically review the existing rules of access to data, both on a national and a EU level, to maximise ease of access to and use of granular data while preserving statistical confidentiality.

Privileged pre-release access to specific (groups of) users has been a recurrent topic in ESGAB's annual reports and recommendations. The current round of peer reviews shows that the diversity in interpretation of the CoP in this area continues in the Member States, not always with the required transparency. Such differentiated treatment of specific user groups can be rather detrimental to the assessment of user orientation and thus to the reputation of producers of official statistics. As this issue is also a matter of impartiality and objectivity, the specific recommendation is already included in Section 2.1 (see Recommendation 4).

**R26.** ESGAB recommends putting harmonised rules and procedures in place throughout the ESS for easy access by properly accredited researchers to disaggregated data and microdata, including databases derived from registers and private sources. Adequate methods for linking different datasets should be developed and the results provided to accredited researchers if there is consent of statistical units for such data reuse. Strict rules and protocols that guarantee statistical confidentiality need to be in place.

#### 2.6.4 ENGAGING IN EFFECTIVE COMMUNICATION AND IN LITERACY INITIATIVES

Effective dissemination and communication are also key. They should be targeted to the needs and communication possibilities of the different user groups. The ESS needs to strengthen its efforts to diversify its communication channels to target different national and international groups of users. As highlighted in the recent peer reviews, the situation is very diverse among Member States.

To be professionally independent and to maintain credibility in the eyes of the users, it is important that members of the ESS publicly address criticisms of validated statistics and misuses of European statistics they produce, as demanded by Principle 1, Indicator 7 of the CoP, which requires to ‘comment publicly on statistical issues, including criticisms and misuses of statistics as far as considered suitable’. This is currently still lacking in many countries. A proactive, standardised and documented procedure on how to identify cases of such criticisms and misuses that require public comment and how to respond appropriately to them would strengthen the credibility of official statistics producers vis-à-vis the general public and contribute to discouraging and thus preventing further undue criticism and misuse of European statistics.

Representatives of the media – as important transmitters for official statistics to the general public – should be able to reach expert contact people easily and speedily in NSIs (ONAs, Eurostat) when they have specific queries or a need for clarification. The situation in these matters still varies a great deal across the ESS.

Some NSIs have invested heavily in social media communication to reach out to wider

audiences, in data visualisation tools and in revamping their websites. Some have gone further by producing their own media supports (blogs, videos, TV shows, etc.) and publishing articles in the press on timely statistics relevant for the public debate. Nevertheless, in many countries, a long-term proactive communication strategy is still missing. The rapidly increasing competition by and success of private data providers makes this deficiency even more relevant and increases the urgency.

Several NSIs have invested in programmes aimed at increasing users’ statistical literacy by developing effective tools to help them interpret statistics correctly. Such initiatives are important and should be pursued, extended and made available in all Member States, not only covering professionals but a wider range of users. Such initiatives would also strengthen the brand of official statistics and help to differentiate them from alternative data sources, but also support efforts to reach out to new user groups.

**R27.** ESGAB recommends that the ESS members review their dissemination and communication practices, using inter alia, feedback and views received from users, with the goal of adequately serving all the different user types/groups, considering their diverse information needs, levels of statistical literacy and preferred channels of information access. Initiatives to enhance statistical literacy should be initiated and pursued to reach and serve new user groups.

### 2.6.5 GETTING REGULAR FEEDBACK FROM USERS AT LARGE

Most NSIs in the ESS have put in place mechanisms to collect user feedback, through dedicated surveys, occasional web inquiries, etc. These ways of receiving feedback often remain ad hoc, are not always representative and are typically not conducted on a regular and systematic basis. Official statistics producers should be interested in receiving regular and unbiased user feedback and should therefore ensure that all users have the possibility to provide feedback on all aspects of official statistics. Representative user satisfaction surveys should be conducted regularly and also cover data provided by ONAs. The same applies at the EU level to Eurostat, where the regular and well-established Eurobarometer could be used for this purpose.

**R28.** ESGAB recommends that the ESS members create adequate possibilities for users to regularly provide feedback on the statistics produced and disseminated. Surveys should be conducted that are both representative and comparable over time. In this regard, EU surveys on the public's trust in official statistics should also be regularly conducted, for instance using the well-established Eurobarometer.



## About ESGAB

Further information about ESGAB is available on its [homepage](#).

ESGAB Secretariat

Eurostat – Bech Building

L-2721 Luxembourg

LUXEMBOURG

Email: [ESGAB-SECRETARIAT@ec.europa.eu](mailto:ESGAB-SECRETARIAT@ec.europa.eu)

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